

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

| | | | |
|-----------------------|-------------------------|--------------------|-------------|
| ADDENDUM NO. <u>1</u> | DATED <u>1/21/2015</u> | ADDENDUM NO. _____ | DATED _____ |
| ADDENDUM NO. <u>2</u> | DATED <u>01/21/2015</u> | ADDENDUM NO. _____ | DATED _____ |

| Number | Description |
|--------|--|
| 1 | Wage Rates, BidItems, Revised or Added Plan Sht. Nos. 2, 14, 19, 23-29, 31, 33, 35, 36, 37, & 39; Amendment EBS Download Required. |
| 2 | BidItems; Revised or Added Plan Sht. Nos. 2, 3, 16, & 2003-2008; Amendment EBS Download Required. |

TOTAL ADDENDA: 2
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

| | |
|--------------------|------------------|
| _____ President | _____ Address |
| _____ Secretary | _____ Address |
| _____ Treasurer | _____ Address |

The following is my (our) itemized proposal.

Revised 09/21/2005

HSIP-0064-01(029) / 105293301

Harrison County(ies)

Intersection Improvements on SR 53 at Canal Road and County Farm Road, known as Federal Aid Project No. HSIP-0064-01(029) / 105293301 in Harrison County.

| Line No. | Item Code | Adj Code | Quantity | Units | Description [Fixed Unit Price] |
|---------------|-----------|----------|----------|-------------|---|
| Roadway Items | | | | | |
| 0010 | 201-A001 | | 1 | Lump Sum | Clearing and Grubbing |
| 0020 | 201-B001 | | 1 | Acre | Clearing and Grubbing |
| 0030 | 202-B064 | | 784 | Linear Feet | Removal of Pipe, 8" And Above |
| 0040 | 202-B078 | | 2,130 | Square Yard | Removal of Pavement, All Types and Depths |
| 0050 | 203-A003 | (E) | 4,049 | Cubic Yard | Unclassified Excavation, FM, AH |
| 0060 | 203-EX038 | (E) | 12,715 | Cubic Yard | Borrow Excavation, AH, FME, Class B7-6 |
| 0070 | 206-A001 | (S) | 400 | Cubic Yard | Structure Excavation |
| 0080 | 209-A004 | | 13,342 | Square Yard | Geotextile Stabilization, Type V, Non-Woven |
| 0090 | 211-A001 | | 29,920 | Square Yard | Topsoil for Slope Treatment, From Right-of-Way |
| 0100 | 213-C001 | | 7 | Ton | Superphosphate |
| 0110 | 220-A001 | | 7 | Acre | Insect Pest Control [\$30.00] |
| 0120 | 223-A001 | | 7 | Acre | Mowing [\$50.00] |
| 0130 | 234-A001 | | 300 | Linear Feet | Temporary Silt Fence |
| 0140 | 406-A001 | | 2,130 | Square Yard | Cold Milling of Bituminous Pavement, All Depths |
| 0150 | 423-A001 | | 2 | Mile | Rumble Strips, Ground In |
| 0160 | 503-C007 | | 8,300 | Linear Feet | Saw Cut, Full Depth |
| 0170 | 602-A001 | (S) | 1,614 | Pounds | Reinforcing Steel |
| 0180 | 603-CA088 | (S) | 464 | Linear Feet | 18" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets |
| 0190 | 603-CA089 | (S) | 96 | Linear Feet | 24" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets |
| 0200 | 603-CA091 | (S) | 32 | Linear Feet | 36" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets |
| 0210 | 603-CB002 | (S) | 1 | Each | 24" Reinforced Concrete End Section |
| 0220 | 603-CB004 | (S) | 2 | Each | 36" Reinforced Concrete End Section |
| 0230 | 603-CE041 | (S) | 120 | Linear Feet | 29" x 18" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets |
| 0240 | 603-CF002 | (S) | 2 | Each | 29" x 18" Concrete Arch Pipe End Section |
| 0250 | 609-D002 | (S) | 2,082 | Linear Feet | Combination Concrete Curb and Gutter Type 2 |
| 0260 | 616-A001 | (S) | 441 | Square Yard | Concrete Median and/or Island Pavement, 4-inch |
| 0270 | 616-A003 | (S) | 2,961 | Square Yard | Concrete Median and/or Island Pavement, 10-inch |
| 0280 | 619-A1003 | | 12,286 | Linear Feet | Temporary Traffic Stripe, Continuous White, Paint |
| 0290 | 619-A2003 | | 17,931 | Linear Feet | Temporary Traffic Stripe, Continuous Yellow, Paint |
| 0300 | 619-A5001 | | 5,105 | Linear Feet | Temporary Traffic Stripe, Detail |
| 0310 | 619-A6001 | | 869 | Linear Feet | Temporary Traffic Stripe, Legend |
| 0320 | 619-D1001 | | 77 | Square Feet | Standard Roadside Construction Signs, Less than 10 Square Feet |

| Line No. | Item Code | Adj Code | Quantity | Units | Description [Fixed Unit Price] |
|----------|--------------|----------|----------|-------------|---|
| 0330 | 619-D2002 | | 560 | Square Feet | Standard Roadside Construction Signs, 10 Square Feet or More, Permanent |
| 0340 | 619-G4005 | | 48 | Linear Feet | Barricades, Type III, Double Faced |
| 0350 | 619-G5001 | | 214 | Each | Free Standing Plastic Drums |
| 0360 | 619-G7001 | | 4 | Each | Warning Lights, Type "B" |
| 0370 | 620-A001 | | 1 | Lump Sum | Mobilization |
| 0380 | 627-J001 | | 38 | Each | Two-Way Clear Reflective High Performance Raised Markers |
| 0390 | 627-K001 | | 157 | Each | Red-Clear Reflective High Performance Raised Markers |
| 0400 | 627-L001 | | 711 | Each | Two-Way Yellow Reflective High Performance Raised Markers |
| 0410 | 630-A001 | | 48 | Square Feet | Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness |
| 0420 | 630-A002 | | 148 | Square Feet | Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness |
| 0430 | 630-C003 | | 98 | Linear Feet | Steel U-Section Posts, 3.0 lb/ft |
| 0440 | 630-E004 | | 157 | Pounds | Structural Steel Angles & Bars, 7/16" x 2 1/2" Flat Bar |
| 0450 | 630-K003 | | 144 | Linear Feet | Welded & Seamless Steel Pipe Posts, 4" |
| 0460 | 635-A001 | | 1,416 | Linear Feet | Vehicle Loop Assemblies |
| 0470 | 636-A005 | | 3,691 | Linear Feet | Shielded Cable, AWG #14, 2 Conductor |
| 0480 | 638-A005 | | 4 | Each | Loop Detector Amplifier, Card Rack Mounted, 4 Channel |
| 0490 | 640-A016 | | 12 | Each | Traffic Signal Heads, Type 1 LED |
| 0500 | 640-A018 | | 4 | Each | Traffic Signal Heads, Type 3 LED |
| 0510 | 640-A056 | | 4 | Each | Traffic Signal Heads, Type 2 FYA LED |
| 0520 | 642-A001 | | 2 | Each | Solid State Traffic Actuated Controllers, Type 8M |
| 0530 | 645-A001 | | 2 | Each | Flasher Assembly |
| 0540 | 647-A001 | | 11 | Each | Pullbox, Type 1 |
| 0550 | 647-A002 | | 2 | Each | Pullbox, Type 3 |
| 0560 | 647-A005 | | 8 | Each | Pullbox, Type 2 |
| 0570 | 653-B001 | | 152 | Square Feet | Street Name Sign, Encapsulated Lens |
| 0580 | 666-B022 | | 303 | Linear Feet | Electric Cable, Underground in Conduit, IMSA 20-1, AWG 8, 2 Conductor |
| 0590 | 666-B054 | | 1,669 | Linear Feet | Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 8 Conductor |
| 0600 | 668-A018 | | 1,060 | Linear Feet | Traffic Signal Conduit, Underground, Type 4, 2" |
| 0610 | 668-B024 | | 1,139 | Linear Feet | Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2" |
| 0620 | 668-B025 | | 320 | Linear Feet | Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3" |
| 0630 | 815-A009 | (S) | 100 | Ton | Loose Riprap, Size 300 |
| 0640 | 907-225-A001 | | 3 | Acre | Grassing |
| 0650 | 907-225-B001 | | 40 | Ton | Agricultural Limestone |

| Line No. | Item Code | Adj Code | Quantity | Units | Description [Fixed Unit Price] |
|-----------------------------|---------------|----------|----------|-------------|--|
| 0660 | 907-225-C001 | | 27 | Ton | Mulch, Vegetative Mulch |
| 0670 | 907-226-A001 | | 7 | Acre | Temporary Grassing |
| 0680 | 907-234-D001 | | 2 | Each | Inlet Siltation Guard |
| 0690 | 907-237-A003 | | 1,808 | Linear Feet | Wattles, 20" |
| 0700 | 907-246-A001 | | 40 | Linear Feet | Sandbags |
| 0710 | 907-249-A001 | | 26 | Ton | Riprap for Erosion Control |
| 0720 | 907-403-A023 | (BA1) | 3,139 | Ton | 12.5-mm, MT, Asphalt Pavement |
| 0730 | 907-403-A024 | (BA1) | 1,172 | Ton | 19-mm, MT, Asphalt Pavement |
| 0740 | 907-403-A022 | (BA1) | 2,259 | Ton | 9.5-mm, MT, Asphalt Pavement |
| 0750 | 907-403-A019 | (BA1) | 1,676 | Ton | 19-mm, ST, Asphalt Pavement |
| 0760 | 907-407-A001 | (A2) | 3,266 | Gallon | Asphalt for Tack Coat |
| 0770 | 907-601-B003 | (S) | 21 | Cubic Yard | Class "B" Structural Concrete, Minor Structures |
| 0780 | 907-603-ALT01 | (S) | 1,478 | Linear Feet | 18" Type A Alternate Pipe |
| 0790 | 907-617-A001 | | 49 | Each | Right-of-Way Marker |
| 0800 | 907-618-A001 | | 1 | Lump Sum | Maintenance of Traffic |
| 0810 | 907-626-B004 | | 1 | Mile | 6" Thermoplastic Traffic Stripe, Continuous White |
| 0820 | 907-626-C003 | | 3 | Mile | 6" Thermoplastic Double Drop Edge Stripe, Continuous White |
| 0830 | 907-626-E004 | | 4 | Mile | 6" Thermoplastic Traffic Stripe, Continuous Yellow |
| 0840 | 907-626-G004 | | 2,366 | Linear Feet | Thermoplastic Detail Stripe, White |
| 0850 | 907-626-G005 | | 3,504 | Linear Feet | Thermoplastic Detail Stripe, Yellow |
| 0860 | 907-626-H004 | | 1,121 | Linear Feet | Thermoplastic Legend, White |
| 0870 | 907-626-H005 | | 944 | Square Feet | Thermoplastic Legend, White |
| 0880 | 907-631-B001 | | 3 | Cubic Yard | Flowable Fill, Non-Excavatable |
| 0890 | 907-639-A002 | | 3 | Each | Traffic Signal Equipment Pole, Type II, 17' Shaft, 50' Arm |
| 0900 | 907-639-A007 | | 2 | Each | Traffic Signal Equipment Pole, Type II, 17' Shaft, 40' Arm |
| 0910 | 907-639-A008 | | 2 | Each | Traffic Signal Equipment Pole, Type II, 17' Shaft, 55' Arm |
| 0920 | 907-639-A012 | | 1 | Each | Traffic Signal Equipment Pole, Type II, 17' Shaft, 45' Arm |
| 0930 | 907-639-C002 | | 34 | Cubic Yard | Pole Foundations, 36" Diameter |
| 0940 | 907-639-D001 | | 120 | Linear Feet | Slip Casing, 36" Diameter |
| 0950 | 907-699-A002 | | 1 | Lump Sum | Roadway Construction Stakes |
| ALTERNATE GROUP AA NUMBER 1 | | | | | |
| 0960 | 907-304-F002 | (GT) | 5,452 | Ton | Size 610 Crushed Stone Base |
| ALTERNATE GROUP AA NUMBER 2 | | | | | |
| 0970 | 907-304-F003 | (GT) | 5,452 | Ton | 3/4" and Down Crushed Stone Base |

| Line No. | Item Code | Adj Code | Quantity | Units | Description [Fixed Unit Price] |
|-----------------------------|--------------|----------|----------|-------|--------------------------------|
| ALTERNATE GROUP AA NUMBER 3 | | | | | |
| 0980 | 907-304-F004 | (GT) | 5,452 | Ton | Size 825B Crushed Stone Base |

DESCRIPTION OF SHEET

DESCRIPTION OF SHEET

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| WKG. | SH. |
| NO. | NO. |

SPECIAL DESIGN SHEETS (90)

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| PERMANENT PAVEMENT MARKING - STA. 219+40 TO STA. 225+20 - HWY 53 | PMD-1 | 41 |
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| PERMANENT PAVEMENT MARKING - STA. 219+40 TO STA. 225+20 - HWY 53 | PMD-1 | 41 |
| PERMANENT PAVEMENT MARKING - STA. 225+20 TO STA. 231+40 - HWY 53 | PMD-2 | 42 |
| PERMANENT PAVEMENT MARKING - STA. 231+40 TO STA. 237+80 - HWY 53 | PMD-3 | 43 |
| PERMANENT PAVEMENT MARKING - STA. 237+80 TO STA. 241+80 - HWY 53 | PMD-4 | 44 |
| PERMANENT PAVEMENT MARKING - STA. 4+20 TO STA. 9+00 - COUNTY FARM ROAD | PMD-5 | 45 |
| PERMANENT PAVEMENT MARKING - STA. 9+00 TO STA. 13+80 - COUNTY FARM / MENNONITE ROAD | PMD-6 | 46 |
| PERMANENT PAVEMENT MARKING - STA. 12+00 TO STA. 20+20 - SHAW ROAD | PMD-7 | 47 |
| PERMANENT PAVEMENT MARKING - STA. 340+00 TO STA. 346+80 - HWY 53 / PALAMINO DRIVE | PMD-8 | 48 |
| PERMANENT PAVEMENT MARKING - STA. 346+80 TO STA. 352+00 - HWY 53 / MARK WEST / CANAL ROADS | PMD-9 | 49 |
| PERMANENT PAVEMENT MARKING - STA. 352+00 TO STA. 359+20 - HWY 53 | PMD-10 | 50 |
| PERMANENT PAVEMENT MARKING - STA. 121+20 TO STA. 125+60 - CANAL ROAD | PMD-11 | 51 |

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| 2-WAY RAISED PAVEMENT MARKERS AT LOCAL ROAD (2-LANE) | CRPMSR-2 | 52 |
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TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS SDSN-8 53

| | | |
|---|------|----|
| INTERSECTION DETAIL - HWY 53 AT SHAW ROAD AND COUNTY FARM ROAD | ID-1 | 54 |
| INTERSECTION DETAIL - MENNONITE ROAD AT COUNTY FARM ROAD | ID-2 | 55 |
| INTERSECTION DETAIL - HWY 53 AT PALAMINO DRIVE AND MARK WEST / CANAL ROAD | ID-3 | 56 |

MISCELLANEOUS DETAIL SHEET MD-1 59

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| DRIVEWAYS, SIDEWALK, CURB AND GUTTER | SDSD-1 | 60 |
| BREAK-AWAY SIGN SUPPORTS | SDSN-6B | 61 |
| SUPERELEVATION TRANSITION FOR LOCAL FACILITIES (V < 40 MPH) | SDSE-1 | 62 |
| SUPERELEVATION CASE I ROTATION ABOUT CENTERLINE (2% NORMAL SUBGRADE) | SDSE-2A | 63 |

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| DETAIL OF CONSTRUCTION SIGNING | DCS-1 | 64 |
| DETAIL OF CONSTRUCTION SIGNING | DCS-2 | 65 |

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| TRAFFIC CONTROL PLAN - PHASE 1 - HWY 53 AT COUNTY FARM AND SHAW ROAD | TC-1 | 66 |
| TRAFFIC CONTROL PLAN - PHASE 1 - COUNTY FARM ROAD AND MENNONITE ROAD | TC-2 | 67 |
| TRAFFIC CONTROL PLAN - PHASE 1 - SHAW ROAD | TC-3 | 68 |
| TRAFFIC CONTROL PLAN - PHASE 1 - HWY 53 AT CANAL ROAD AND MARK WEST ROAD AND PALAMINO ROAD | TC-4 | 69 |
| TRAFFIC CONTROL PLAN - PHASE 1 - CANAL ROAD | TC-5 | 70 |
| TRAFFIC CONTROL PLAN - PHASE 2 - HWY 53 AT COUNTY FARM ROAD AND SHAW ROAD | TC-6 | 71 |
| TRAFFIC CONTROL PLAN - PHASE 2 - COUNTY FARM ROAD AND MENNONITE ROAD | TC-7 | 72 |
| TRAFFIC CONTROL PLAN - PHASE 2 - SHAW ROAD | TC-8 | 73 |
| TRAFFIC CONTROL PLAN - PHASE 2 - HWY 53 AT CANAL ROAD AND MARK WEST ROAD AND PALAMINO ROAD | TC-9 | 74 |
| TRAFFIC CONTROL PLAN - PHASE 2 - CANAL ROAD | TC-10 | 75 |

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| TEMPORARY PAVEMENT MARKING - STA. 219+40 TO STA. 225+20 - HWY 53 | TPMD-1 | 76 |
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|----------------------------|------------------------------|-------------------------------------|--------|----|
| TEMPORARY PAVEMENT MARKING | - STA. 219+40 TO STA. 225+20 | - HWY 53 | TPMD-1 | 76 |
| TEMPORARY PAVEMENT MARKING | - STA. 225+20 TO STA. 231+40 | - HWY 53 | TPMD-2 | 77 |
| TEMPORARY PAVEMENT MARKING | - STA. 231+40 TO STA. 241+80 | - HWY 53 | TPMD-3 | 78 |
| TEMPORARY PAVEMENT MARKING | - STA. 4+20 TO STA. 13+80 | - COUNTY FARM ROAD / MENNONITE ROAD | TPMD-4 | 79 |
| TEMPORARY PAVEMENT MARKING | - STA. 12+00 TO STA. 20+20 | - SHAW ROAD | TPMD-5 | 80 |
| TEMPORARY PAVEMENT MARKING | - STA. 340+00 TO STA. 347+00 | - HWY 53 / PALAMINO DRIVE | TPMD-6 | 81 |
| TEMPORARY PAVEMENT MARKING | - STA. 347+00 TO STA. 352+00 | - HWY 53 / MARK WEST | TPMD-7 | 82 |
| TEMPORARY PAVEMENT MARKING | - STA. 352+00 TO STA. 359+20 | - HWY 53 | TPMD-8 | 83 |
| TEMPORARY PAVEMENT MARKING | - STA. 121+20 TO STA. 126+20 | - CANAL ROAD | TPMD-9 | 84 |

[illegible]

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| STATE | PROJECT NO. |
| MISS. | HSIP-0064-01(029) |

SUMMARY OF QUANTITIES (SHEET 3)

[illegible]

- ① ALL TRAFFIC SIGNAL POLES SHALL BE HOT DIPPED GALVANIZED. WIND SPEED OF 140MPH SHALL BE USED FOR DESIGN. SEE TSD-6 FOR DESIGN CRITERIA.
- ② ALL SIGNAL HEADS SHALL BE LED AND BLACK IN COLOR. VISORS AND BACKPLATES SHALL BE BLACK IN COLOR. ALL HEADS SHALL BE EQUIPPED WITH REFLECTORIZED BLACKPLATES. (SEE TSD-1)
- ③ PAY ITEM SHALL INCLUDE ELECTRIC CABLE, AERIALY SUPPORTED IN MAST ARMS.
- ④ ALL FOUNDATIONS SHALL BE POURED USING CLASS "DS" CONCRETE.
- ⑤ TRAFFIC SIGNAL CABINETS, CONTROLLERS, MMU'S ETC. SHALL BE WIRED AND EQUIPPED TO OPERATE FYA HEADS IN COMPACT MODE. THE CABINET SHALL HAVE A REAR DOOR. AUTO-HAND SWITCH IN THE POLICE PANEL, PULLOUT TRAY AND A 7-SLOT CARD RACK. CONTROLLERS AND MMU'S SHALL BE ETHERNET READY AND COMPATIBLE WITH MDOT'S EXISTING TRAFFIC SIGNAL MANAGEMENT SOFTWARE. A LEASED DATA LINE SHALL BE PROVIDED FOR COMMUNICATION (COST ABSORBED).
- ⑥ SLIP CASINGS SHALL ONLY BE USED AT THE DIRECTION OF ENGINEER IF GROUNDWATER IS PRESENT IN EXCAVATED HOLE.
- ⑦ POWER SERVICE METER SHALL NOT BE INSTALLED ON CONTROLLER CABINET OR MAST ARM POLE SHAFTS. A SEPARATE MOUNTING POLE FOR THESE ITEMS IS REQUIRED AND SHALL BE INSTALLED AS CLOSE TO CONTROLLER CABINET AS PRACTICAL. PROPOSED LOCATION MUST BE PRE-APPROVED BY ENGINEER. SEE GENERAL NOTE #12 FOR ADDITIONAL INFORMATION. SEE TSD-5.
- ⑧ LENSES SHALL BE 12" NOMINAL DIAMETER AS SHOWN IN SECTION 722 IN THE MISSISSIPPI STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
- ⑨ TO BE SOLAR POWERED
- ⑩ PIPE ON MARK WEST RD. @ APPROX. STA. 10+25

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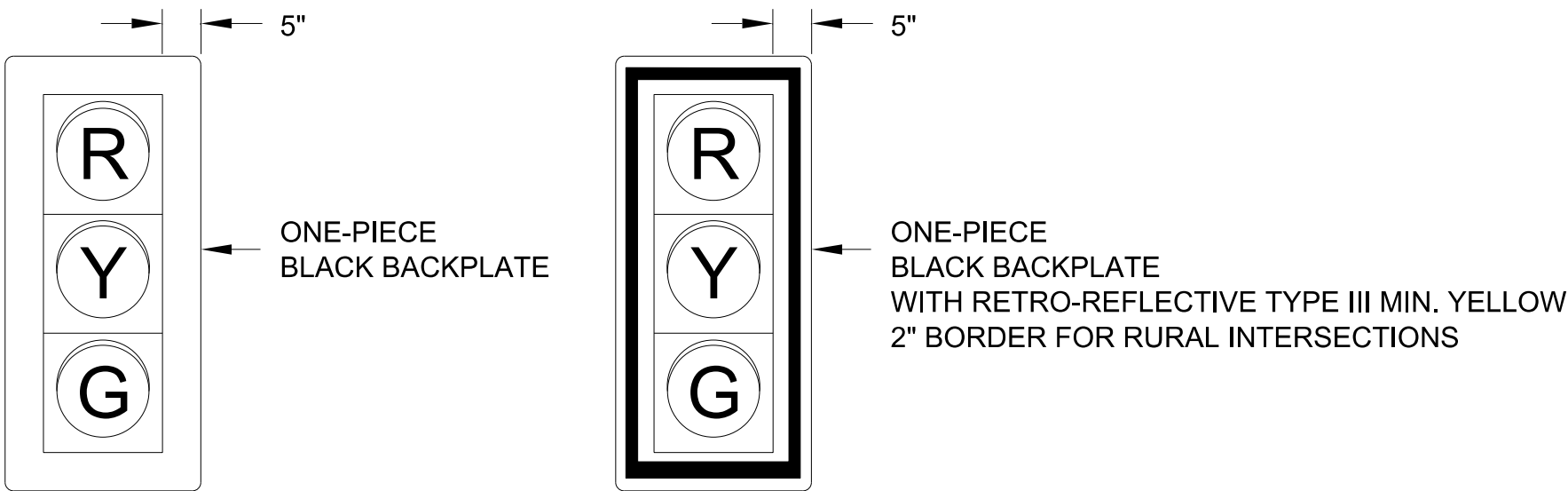
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|  | C.L.B. | BY | MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES HWY. 53 |  WORKING NUMBER SQS-3 SHEET NUMBER 16 |
| | 1/15/15 REUSED PAI ITEMS & SHIFTED FOOTING LABELS. | REVISION | | |
| PROJ. NO.: HSIP-0064-01(029) COUNTY: HARRISON | | | | |
| DATE: FILENAME: SQS53.DGN DESIGN TEAM BRELAND CHECKED DATE | | | | |

| STATE | PROJECT NO. |
|-------|-------------------|
| MISS. | HSIP-0064-01(029) |

| TYPE 1 | TYPE 2 | TYPE 2 FYA | TYPE 3 | TYPE 4 | TYPE 5 | TYPE 6 | TYPE 7 | TYPE 8 |
|--------|--------|------------|--------|--------|--------|--------|--------|--------|
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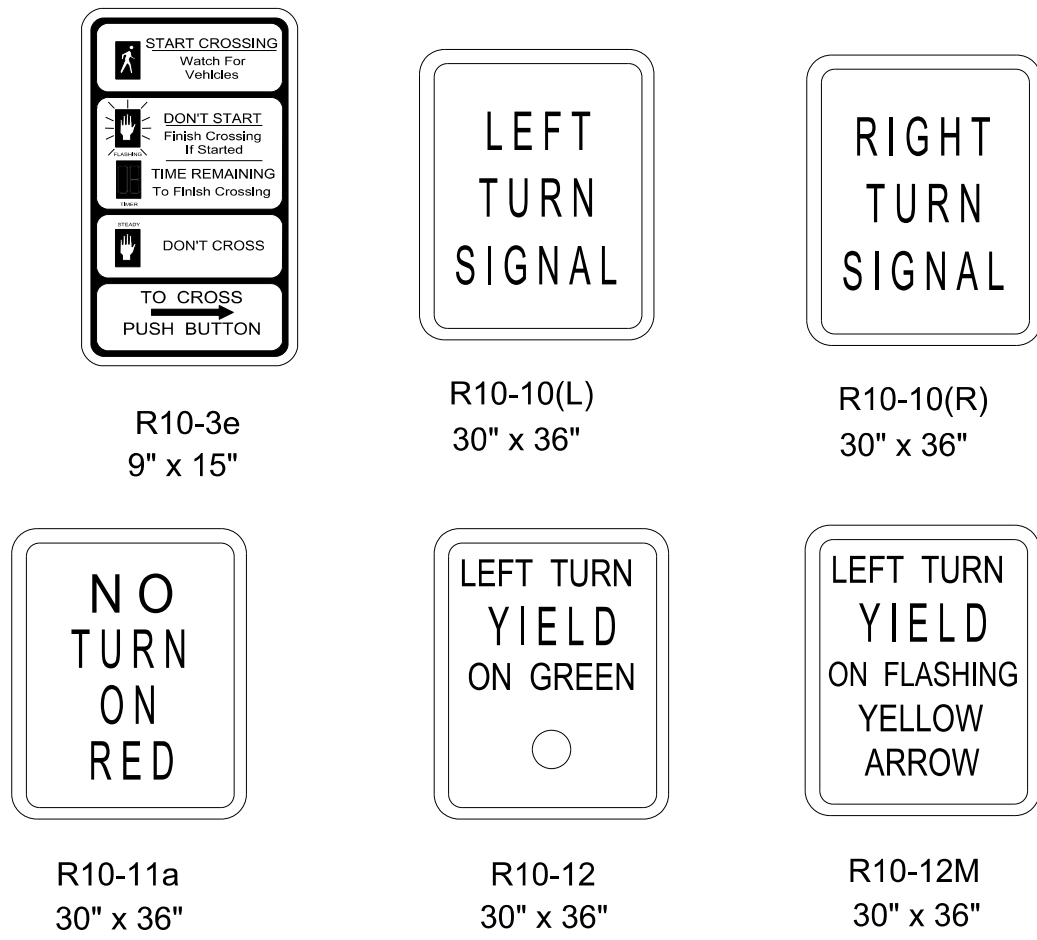
- NOTES:
- ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
 - ALL SIGNAL HEADS SHALL BE L.E.D. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE OPTICALLY PROGRAMMED VIA LOUVERS.
 - LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
 - TYPE 6 SIGNAL HEAD SHALL BE FURNISHED WITH R10-3e SIGN & PEDESTRIAN PUSHBUTTON. TYPE 6 SIGNAL HEAD SYMBOLS/NUMBERS SHALL BE FULLY ILLUMINATED (NO OUTLINE SYMBOLS ALLOWED).
 - TYPE 7 SIGNAL HEAD SHALL BE FURNISHED WITH R10-12 SIGN WHEN INDICATED ON PLANS. TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-10L SIGNS. TYPE 2 FYA SIGNAL HEAD SHALL BE FURNISHED WITH A FYA SIGN. COST OF SIGNAL SIGNS SHALL BE COST ABSORBED.
 - FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



- NOTE:
- ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



- NOTES:
- ALUMINUM SIGN BLANKS ARE TO BE ALLOY 5052-H38 AND 0.08" (NOMINAL) THICK.
 - THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AS REQUIRED.
 - NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
 - CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
 - THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D.
 - THE BACKGROUND SHALL BE REFLECTORIZED USING TYPE IX SHEETING.

SIGNAL PLAN LEGEND

| | |
|--|--|
| | SIGNAL HEAD REQUIRED / TYPE |
| | EXISTING SIGNAL HEAD |
| | SIGN |
| | VEHICLE LOOP DETECTOR |
| | QUADRAPOLE VEHICLE LOOP DETECTOR |
| | VEHICLE LOOP DETECTOR NUMBER |
| | WIRELESS MAGNETOMETER SENSOR |
| | BASE MOUNTED CABINET FOR SIGNAL CONTROLLER |
| | POLE MOUNTED CABINET FOR SIGNAL CONTROLLER |
| | EXISTING POLE |
| | POLE REQUIRED |
| | NEW PEDESTAL POLE |
| | EXISTING PULLBOX |
| | PULLBOX REQUIRED (TYPE 1) |
| | PULLBOX REQUIRED (TYPE SPECIFIED ON PLAN SHEETS) |
| | MAST ARM POLE REQUIRED |
| | RADAR DETECTOR |
| | CAMERA DETECTOR |
| | OPTICAL DETECTOR UNIT |
| | CONDUIT |
| | ROLL PIPE |
| | LUMINAIRE |
| | RADIO INTERCONNECT ANTENNA |
| | TWO-WAY WIRELESS ANTENNA |
| | WIRELESS REPEATER |
| | P.B. |
| | S.C. |
| | POW |
| | LUM |
| | ODC |
| | 4c |
| | I.C. |
| | RAD |
| | FDC |
| | VDC |

- INTERCONNECT CABLE SHALL BE EITHER IMSA 40-2 OR IMSA 40-4 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
- SIGNAL SUPPLY CABLE SHALL BE IMSA 20-1-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
- POWER SUPPLY CABLE SHALL BE IMSA 20-1 2 CONDUCTOR CABLE, STRANDED. AWG NUMBER AS SHOWN ON PLANS.
- DETECTOR SHIELDED CABLE SHALL BE IMSA 50-2 SIGNAL CABLE, AWG #14 STRANDED COPPER CONDUCTORS, UNLESS OTHERWISE NOTED ON THE PLANS.
- POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
- POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATIONS SHALL BE CUT OFF 6" BELOW GROUND OR REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.
- LOOP AMPLIFIERS SHALL BE REQUIRED AS SHOWN ON PLANS WHERE TWO OR MORE LOOPS ARE CONNECTED TO THE SAME CHANNEL, THEY SHALL BE WIRED IN SERIES.
- THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II. DO NOT CONSIDER GALLOPING OR TRUCK FORCES. USE 50 YEAR DESIGN LIFE. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2001 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS.
- DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I, II, III AND IV STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
- THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
- ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
- POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS. GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION AS DIRECTED BY THE ENGINEER
- TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED AND SALVAGED BY THE CONTRACTOR WITH THE COST TO BE ABSORBED, UNLESS OTHERWISE NOTED IN THE PLANS. THE EXISTING POLES, CABINETS, CONTROLLERS, TRAFFIC SIGNAL HEADS, AND OTHER ITEMS AS NOTED ON PLANS ARE TO BE STOCKPILED AS DIRECTED BY THE ENGINEER FOR PICKUP BY STATE FORCES OR AS NOTED ON PLANS. ALL OTHER SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE TRAFFIC SIGNAL CONTROLLER. FOR SPAN WIRE INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT AERIAL TO THE SIGNAL POLE NEAREST THE CONTROLLER, THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND DIRECTLY TO THE POWER SERVICE PANEL, THEN TO THE CONTROLLER, AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE APPLICATION WITH THE POWER COMPANY IN ADVANCE OF NEEDING THE SERVICE. INSTALLATION OF NEW SERVICE POLE (IF NEEDED) IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS COST ABSORBED.
- IF IT IS NECESSARY TO RUN ELECTRIC SERVICE CABLE FROM ONE POLE TO ANOTHER, THE SERVICE CABLE SHALL BE LASHED TO A SEPARATE MESSENGER CABLE LOCATED 1 FOOT MIN. ABOVE THE SIGNAL CABLE.
- VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED.
- PEDESTRIAN PUSHBUTTONS AND SIGNS TO BE INCLUDED IN PAY ITEM FOR TYPE 6 HEADS AT NO ADDITIONAL COST. SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED.
- FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).
- REFER TO WORKING NUMBER TSD-5 "CONDUIT ENTRANCE DETAIL" WHEN NEW CONDUIT(S) ARE REQUIRED AT EXISTING SIGNAL POLES OR CONTROLLERS.
- MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR ELECTRIC CABLE.
- FOR PROTECTED/PERMITTED LEFT TURN PHASING: TYPE 7 OR 7A TRAFFIC SIGNAL HEADS (FIVE SECTION HEADS) SHALL OPERATE SUCH THAT THE CIRCULAR INDICATIONS DISPLAYED WILL BE IDENTICAL AND SIMULTANEOUS TO THE CIRCULAR INDICATIONS FOR THE ADJACENT THROUGH MOVEMENT SIGNAL HEADS; A CIRCULAR RED AND EITHER A GREEN ARROW OR YELLOW ARROW MAY BE DISPLAYED SIMULTANEOUSLY IN THE SAME FIVE SECTION HEAD. FOR TYPE 2 FYA TRAFFIC SIGNAL HEADS, OPERATION SHALL BE AS FOLLOWS: THE PROTECTED PHASE OF THIS OPERATION SHALL DISPLAY A SOLID GREEN ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THE PERMITTED PORTION OF THIS OPERATION SHALL START WITH A FLASHING YELLOW ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THERE SHALL BE A DELAY (AS DIRECTED BY THE ENGINEER) BETWEEN THE END OF THE PROTECTED PORTION OF THIS OPERATION AND THE BEGINNING OF THE PERMITTED PORTION OF THIS OPERATION. DURING THIS DELAY, THE OPPOSING PHASE THRU HEADS ARE CAPABLE OF DISPLAYING A GREEN BALL. SIGNAL CONTROLLER WITH FIRMWARE NECESSARY TO ACCOMPLISH THIS DELAY SHALL BE PROVIDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS IF NECESSARY TO ACCOMMODATE ROADWAY CONSTRUCTION AND SHALL BE PAID FOR UNDER PAY ITEM 619-H1, TRAFFIC SIGNALS.
- CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH DISTRICT OFFICE, PROJECT OFFICE AND TRAFFIC ENGINEERING FOR SIGNAL PORTION OF THE PROJECT.
- THERE SHALL BE A 30 DAY BURN IN PERIOD FROM THE TIME THE SIGNAL IS OPERATIONAL AS OUTLINED IN SECTION 634.03.3 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION.
- EMERGENCY VEHICLE PREMPTION (WHERE REQUIRED ON THE PLANS) SHALL HAVE A SECURITY ENABLED PHASE SELECTOR.

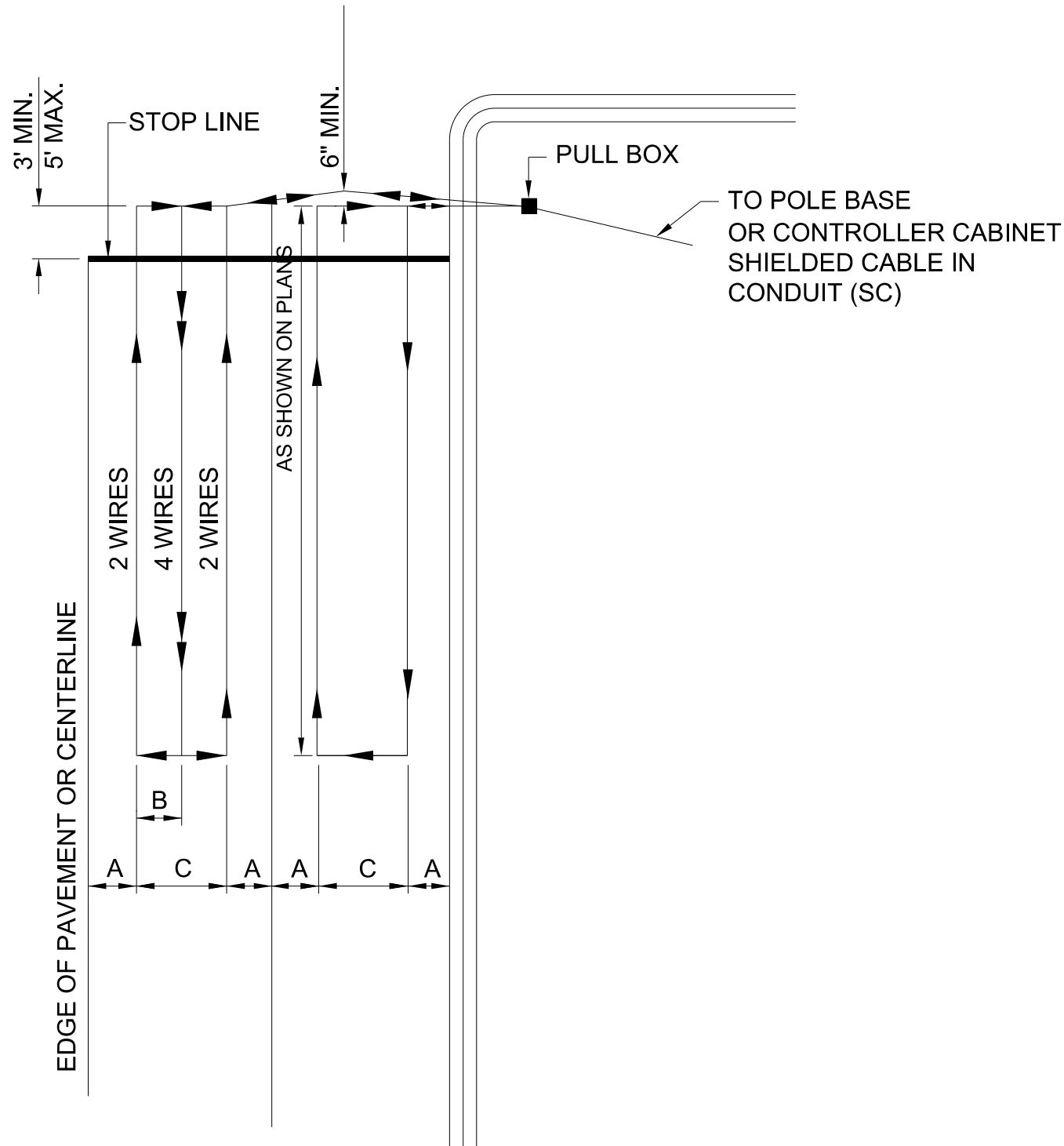
| | | | | | | | |
|--|--|--|--|---|--|--|--|
| | | | | MISSISSIPPI DEPARTMENT OF TRANSPORTATION | | | |
| | | | | DETAIL OF TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS, AND GENERAL NOTES | | | |
| | | | | PROJECT NO.: HSIP-0064-01(029) | | | |
| | | | | COUNTY: HARRISON | | | |
| | | | | FILENAME: _____ | | | |
| | | | | DESIGN TEAM _____ CHECKED _____ DATE _____ | | | |
| | | | | WORKING NUMBER TSD-1 | | | |
| | | | | SHEET NUMBER 2003 | | | |

ADDENDUM

| | |
|-------|-------------------|
| STATE | PROJECT NO. |
| MISS. | HSIP-0064-01(029) |

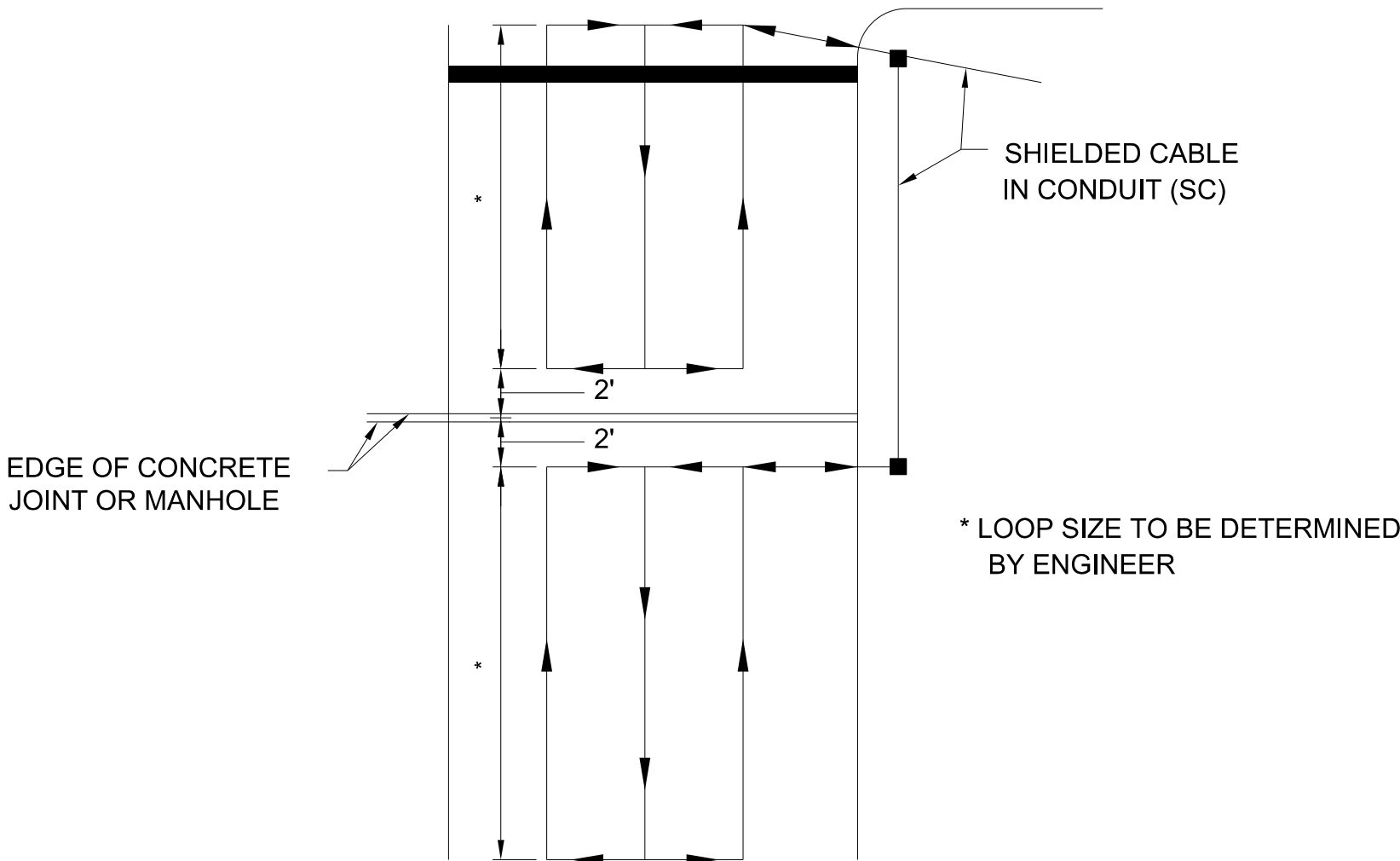
| | | | |
|------------|------|------|-----|
| LANE WIDTH | "A" | "B" | "C" |
| 10' | 2.5' | 2.5' | 5' |
| 11' | 2.5' | 3' | 6' |
| 12' | 3' | 3' | 6' |
| 14' | 3' | 4' | 8' |

MINIMUM LOOP SEPARATION
WHEN NO LANE LINES ARE
PRESENT IS 3'

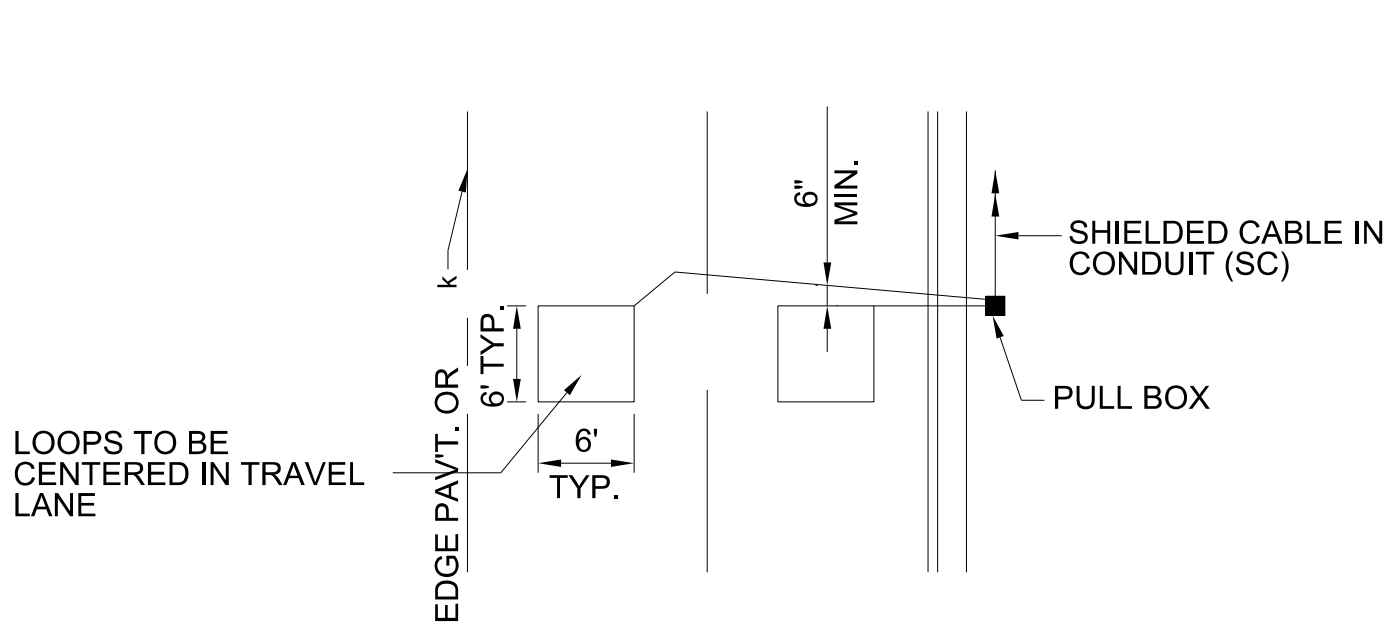


LARGE LOOP DETECTOR INSTALLATION DETAIL
NOT TO SCALE

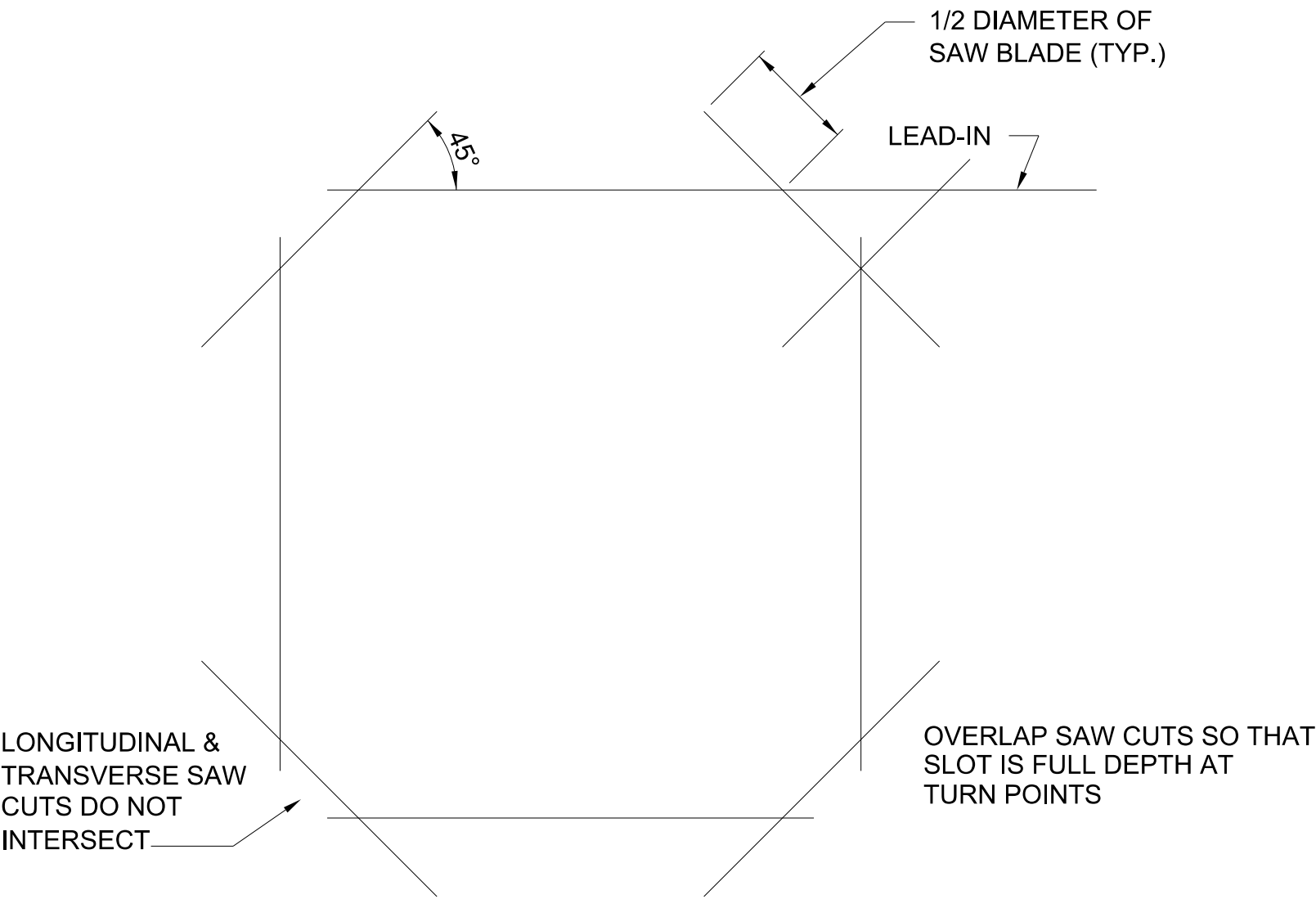
NOTE
NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT, AND NO MANHOLES, INLETS, ETC. MAY BE LOCATED WITHIN A LOOP. IF ANY OF THE ABOVE ARE ENCOUNTERED THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE ABOVE ITEMS ARE UNAVOIDABLE, SMALLER LOOPS AS SHOWN BELOW MAY BE USED. SMALLER LOOPS USED TO REPLACE ONE LARGE LOOP MAY BE CONNECTED TO ONE CHANNEL.



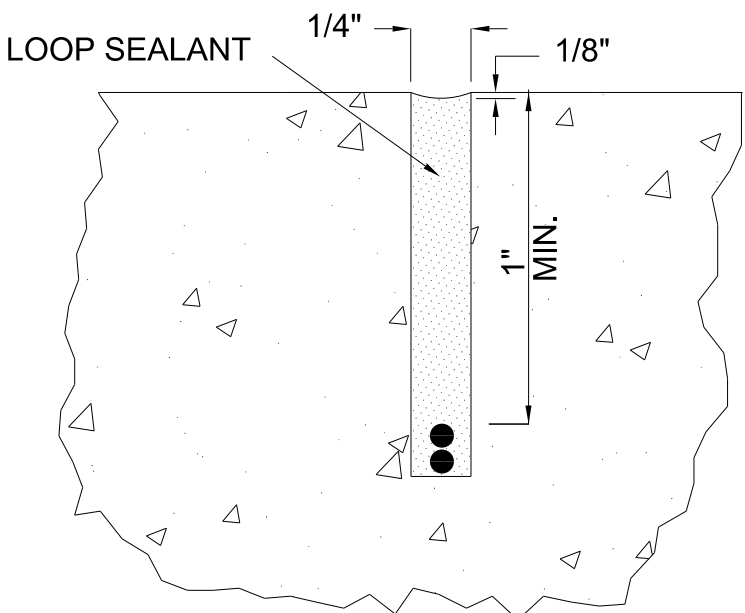
TYPICAL DETAIL OF LOOP DETECTOR WHERE TRANSVERSE
CONCRETE JOINTS, MANHOLES, ETC. ARE ENCOUNTERED
NOT TO SCALE



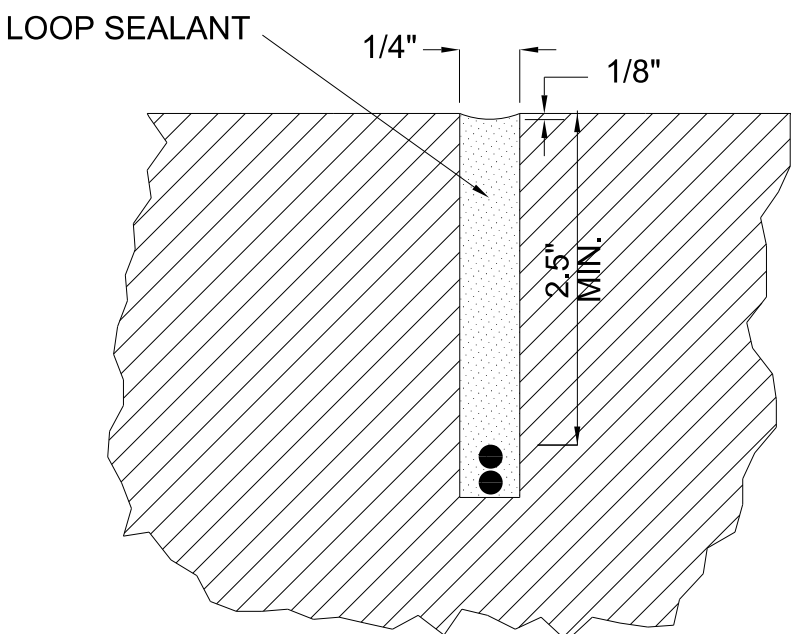
SMALL LOOP DETECTOR INSTALLATION DETAIL
NOT TO SCALE



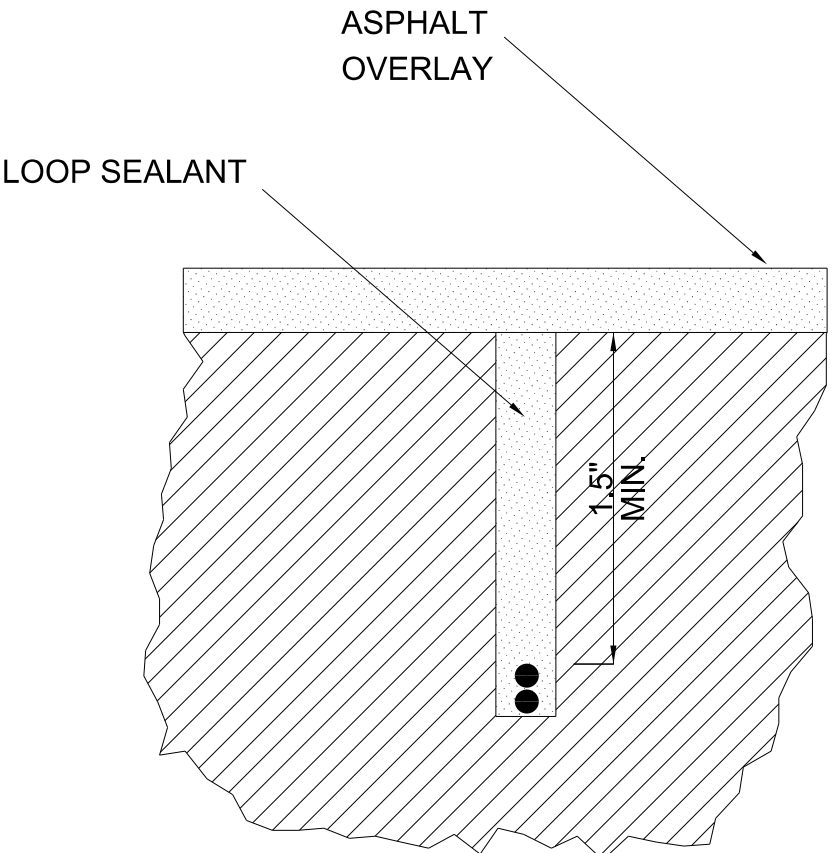
LOOP SLOT CONSTRUCTION DETAIL
NOT TO SCALE



CONCRETE



IN PLACE ASPHALT



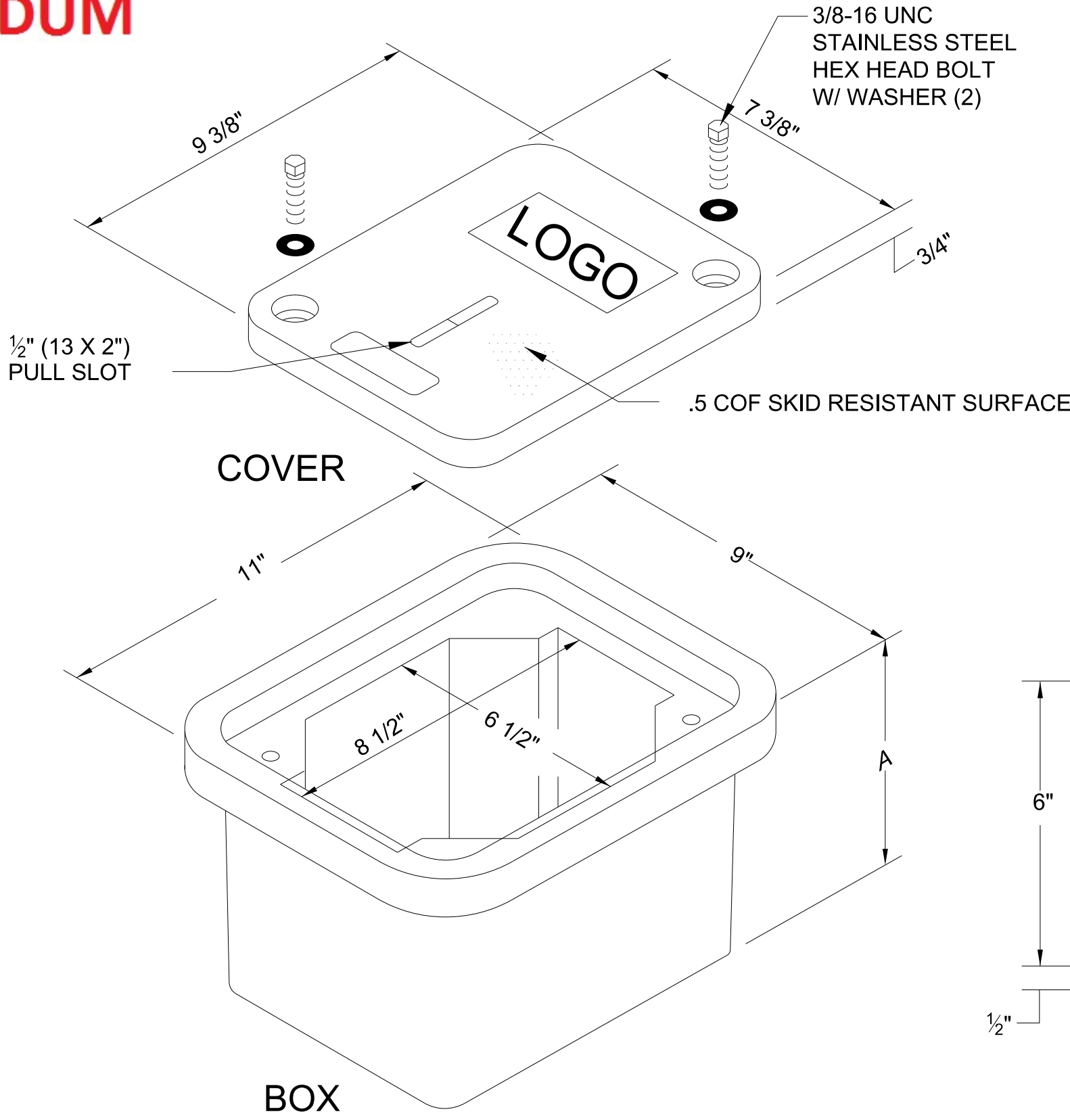
ASPHALT
(NEW CONSTRUCTION)

| | | | | | |
|--|--|--|--|----------------|--|
| MISSISSIPPI DEPARTMENT OF TRANSPORTATION | | | | WORKING NUMBER | |
| LOOP DETECTOR DETAILS FOR TRAFFIC SIGNAL INSTALLATION | | | | TSD-2 | |
| PROJECT NO.: HSIP-0064-01(029) | | | | SHEET NUMBER | |
| COUNTY: HARRISON | | | | 2004 | |
| FILENAME: _____ | | | | DATE | |
| DESIGN TEAM | | | | CHECKED | |
| | | | | DATE | |

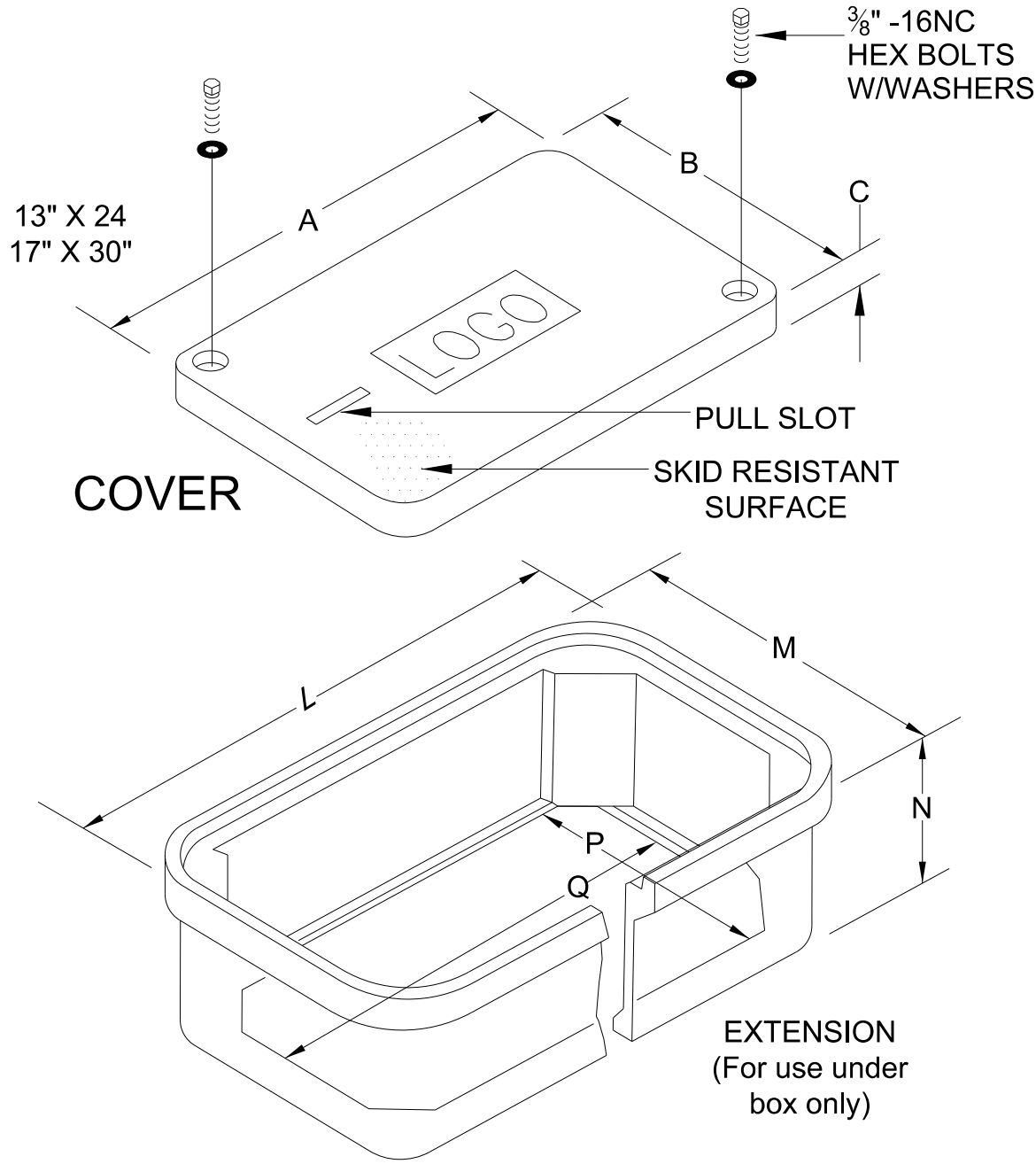
ADDENDUM

FMS CON.: 105293/301000

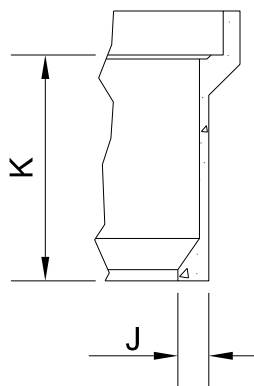
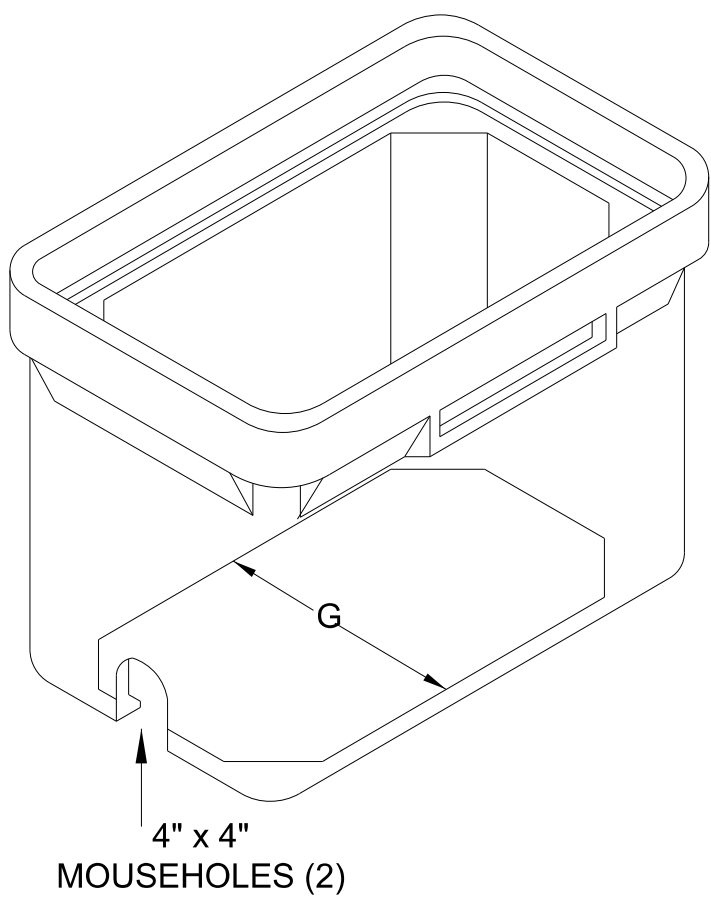
| | |
|-------|-------------------|
| STATE | PROJECT NO. |
| MISS. | HSIP-0064-01(029) |



TYPE 1 PULLBOX
NOT TO SCALE



TYPE 2 or 3 PULLBOX
NOT TO SCALE



- OPTIONS
1. Stainless steel standard penta-head bolt.
 2. Specific cove logo.
 3. Green or other colors
 4. Special holes/knockouts

Covers (blank unless logo is specified)

| DESCRIPTION | DIMENSION (IN.) | | | WT. LBS. |
|---------------|-----------------|--------|---|----------|
| | A | B | C | |
| Locking | 23-1/4 | 13-3/4 | 2 | 32 |
| Cover | 30-1/2 | 17-1/2 | 2 | 47 |
| Non-Locking | 23-1/4 | 13-3/4 | 2 | 33 |
| Cover | 30-1/2 | 17-1/2 | 2 | 48 |
| Steel Locking | 23-1/4 | 13-3/4 | 2 | 65 |
| Cover | 30-1/2 | 17-1/2 | 2 | 90 |
| Heavy Duty | 23-1/4 | 13-3/4 | 2 | 50 |
| Locking Cover | 30-1/2 | 17-1/2 | 2 | 74 |

Covers (blank unless logo is specified)

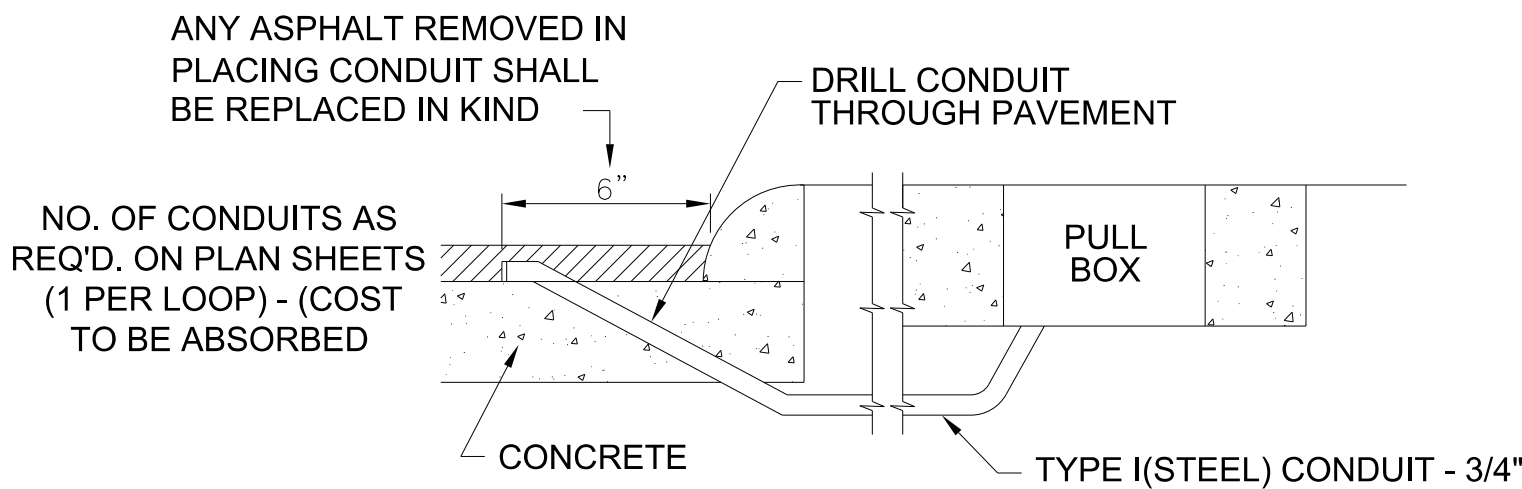
| DESCRIPTION | WEIGHT # | DESIGN/TEST LOAD # | ANSI TIER |
|--------------------|----------|--------------------|-----------|
| W/2 Bolts | 4 | 8,000 / 12,000 | 8 |
| Gasketed w/4 Bolts | 4 | 8,000 / 12,000 | 8 |

Gasketed covers must be used with a gasketed box. Gaskets reduce the inflow of fluids but do not make the enclosure water tight.

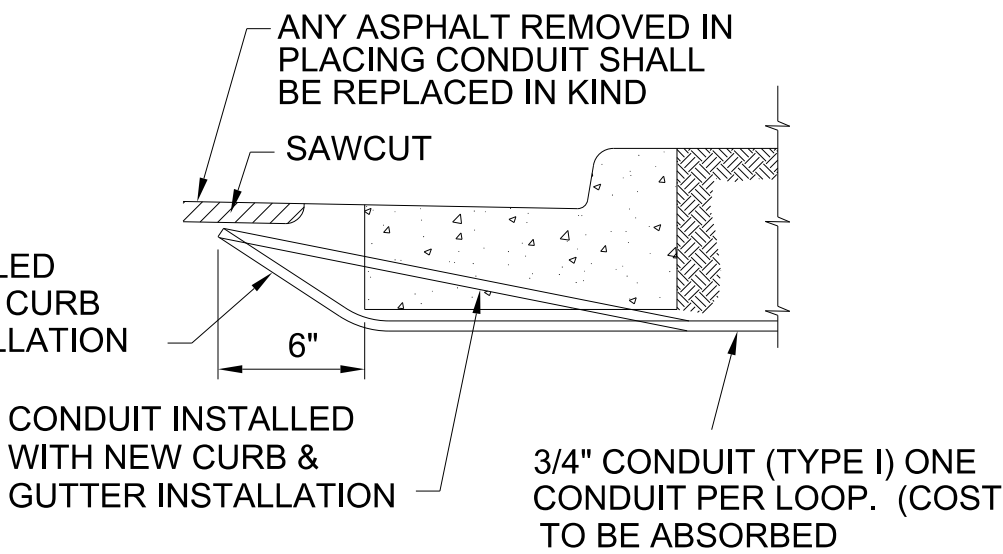
Boxes (Stackable with self-aligning, replaceable EZ-Nut)

| DESCRIPTION | WEIGHT # | DIMENSION A | DESIGN/TEST LOAD # | ANSI TIER |
|-----------------------|----------|-------------|--------------------|-----------|
| Open Bottom | 12 | 6 3/4" | 15,000 / 22,500 | 15 |
| Open Bottom w/Gasket | 12 | 6 3/4" | 15,000 / 22,500 | 15 |
| Solid Bottom | 14.5 | 7 1/4" | 15,000 / 22,500 | 15 |
| Solid Bottom w/Gasket | 14.5 | 7 1/4" | 15,000 / 22,500 | 15 |

Dimensions & weights in parentheses are metric equivalent.



SIDE



CONDUIT NOTES:

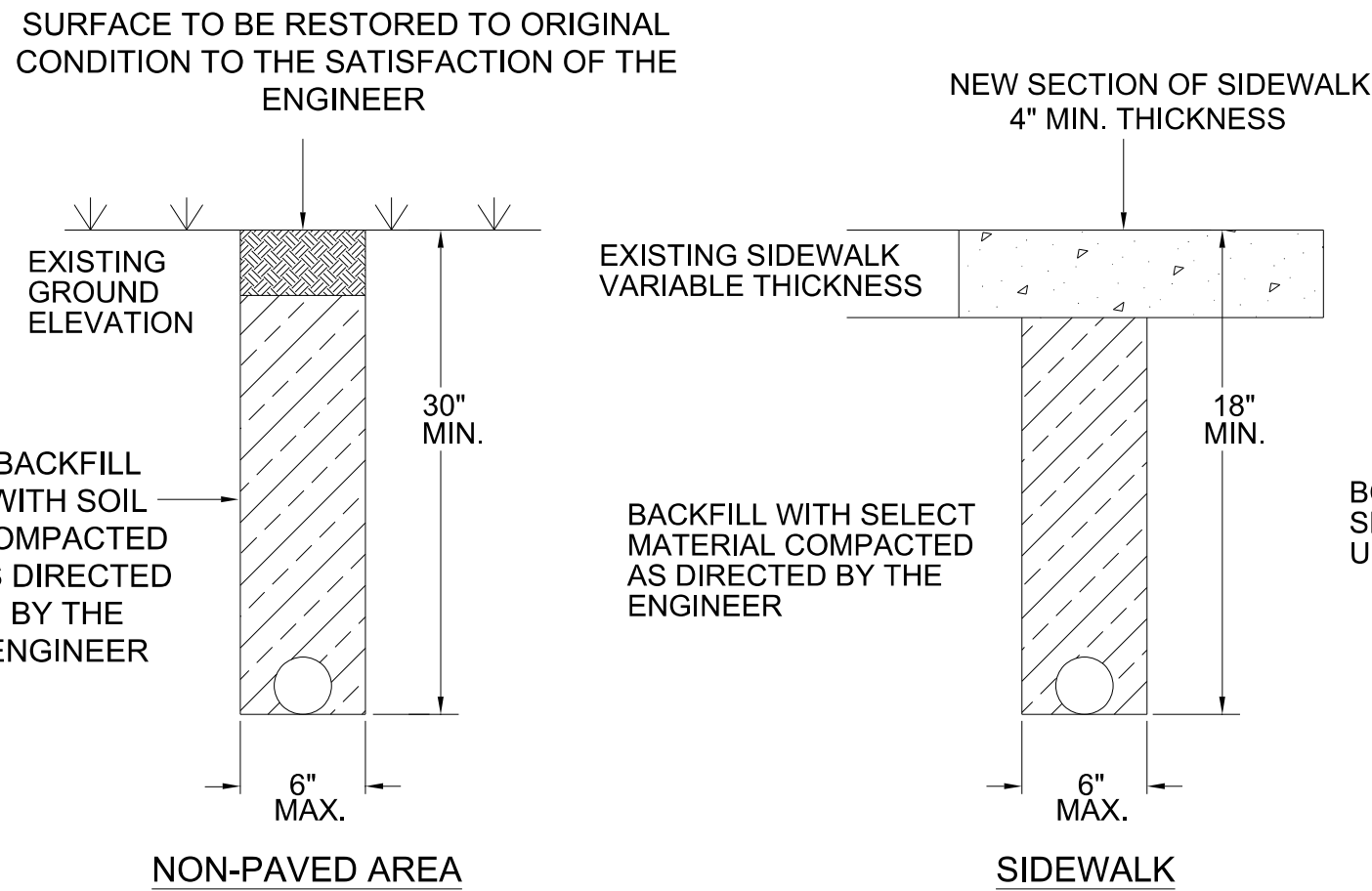
1. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED.

2. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.

3. TYPE I CONDUIT IS RIGID PIPE; TYPE IV CONDUIT IS PVC.

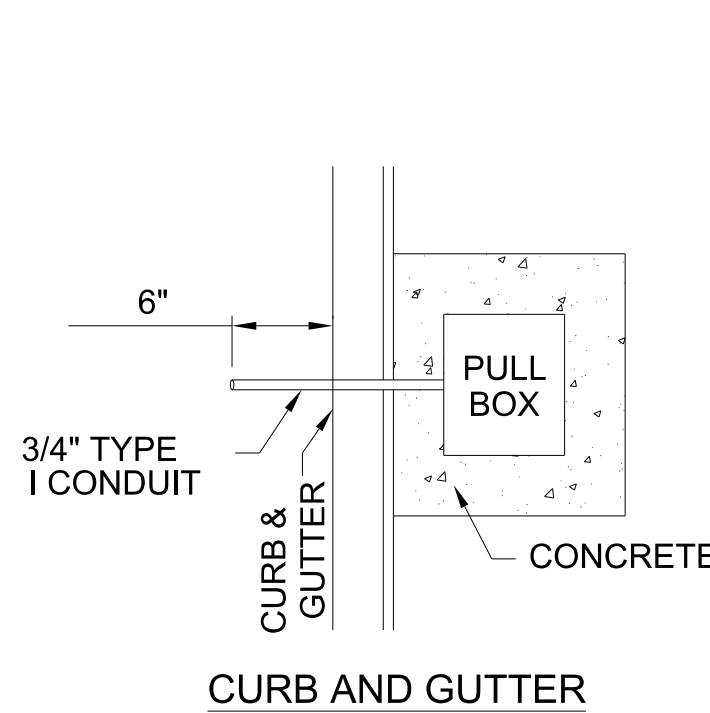
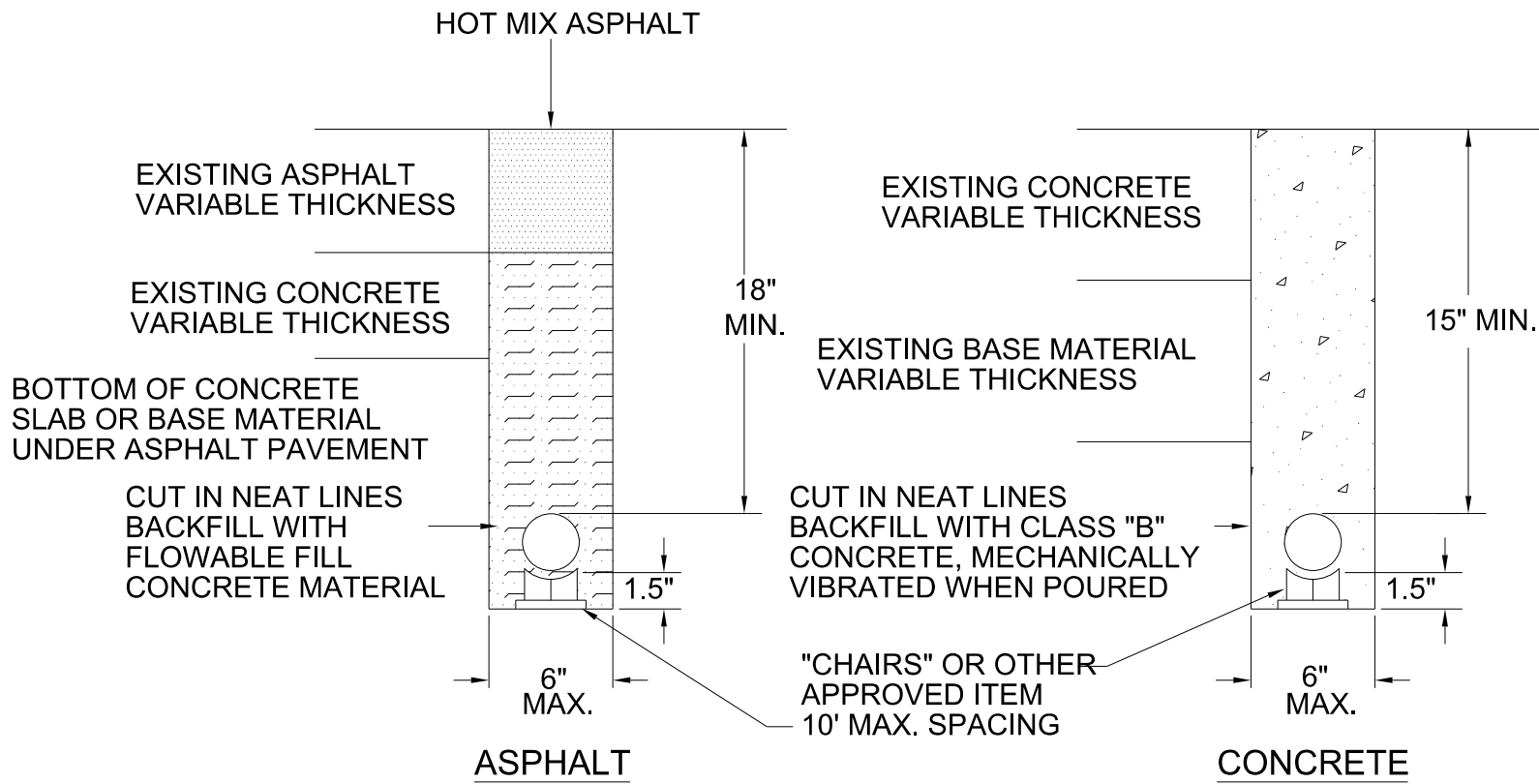
4. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.

5. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR. (COST ABSORBED)



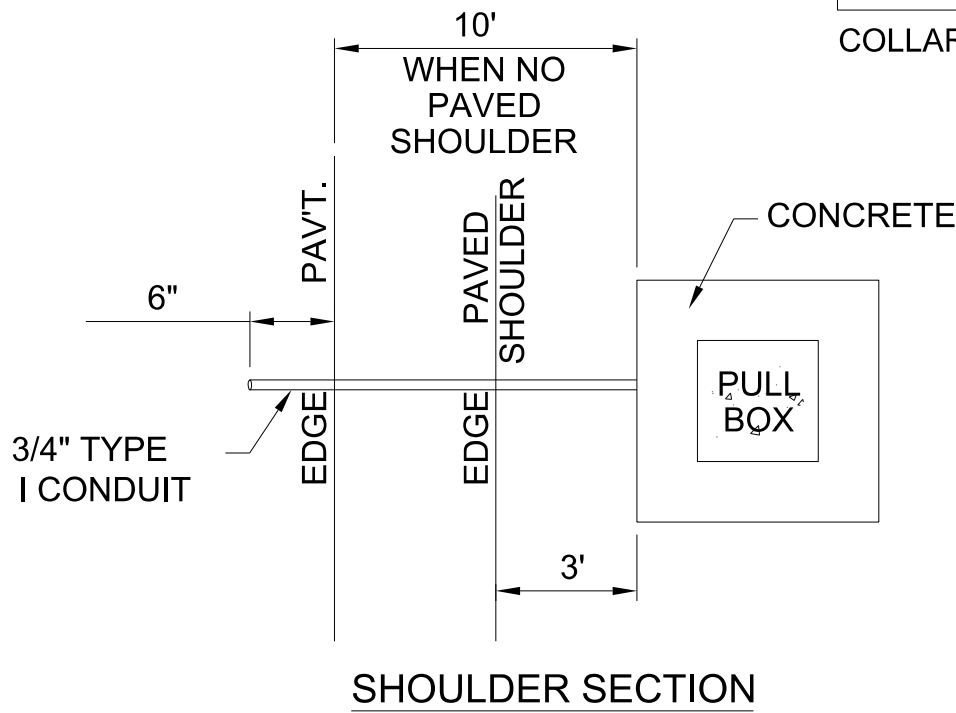
CONDUIT TRENCHING DETAIL

NOT TO SCALE



PULL BOX LOCATION DETAIL

NOT TO SCALE



NOMINAL PULLBOX SIZES

| TYPE 1 | TYPE 2 | TYPE 3 |
|-------------------|-----------------|-----------------|
| 9" x 11" x 6 3/4" | 15" x 25" x 18" | 19" x 32" x 24" |

COLLARS AND GRAVEL UNDER PULLBOX REQUIRED FOR ALL TYPES OF PULLBOXES

Extensions (For use under box only)

| DESCRIPTION | DIMENSION (IN.) | | | | | | | WT. LBS. |
|---------------|-----------------|--------|-------|--------|--------|---|-----|----------|
| | L | M | N | P | Q | R | S | |
| Extension | 23-3/4 | 14-1/4 | 8-3/4 | 10-1/4 | 19-3/4 | 8 | 1 | 25 |
| (One Per Box) | 30-7/8 | 17-7/8 | 8-3/4 | 13-7/8 | 26-7/8 | 8 | 1 | 47 |
| Extension | 23-3/4 | 14-1/4 | 9-1/4 | N/A | N/A | 8 | N/A | 35 |
| w/ Solid Base | 30-7/8 | 17-7/8 | 9-1/4 | N/A | N/A | 8 | N/A | 65 |

Underground enclosures shall be Composolite. Enclosures and covers shall be concrete gray color and rated for no less than 8,000 lbs. over a 10" X 10" area and be designed and tested to temperatures of -50 F. Material compressive strength shall be no less than 11,000 psi. Covers shall have a minimum coefficient of friction of .5. Boxes shall be stackable for extra depth.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PULL BOX AND CONDUIT
TRENCHING DETAILS FOR
TRAFFIC SIGNAL
INSTALLATION

PROJECT NO.: HSIP-0064-01(029)

COUNTY: HARRISON

FILENAME:

DESIGN TEAM

CHECKED

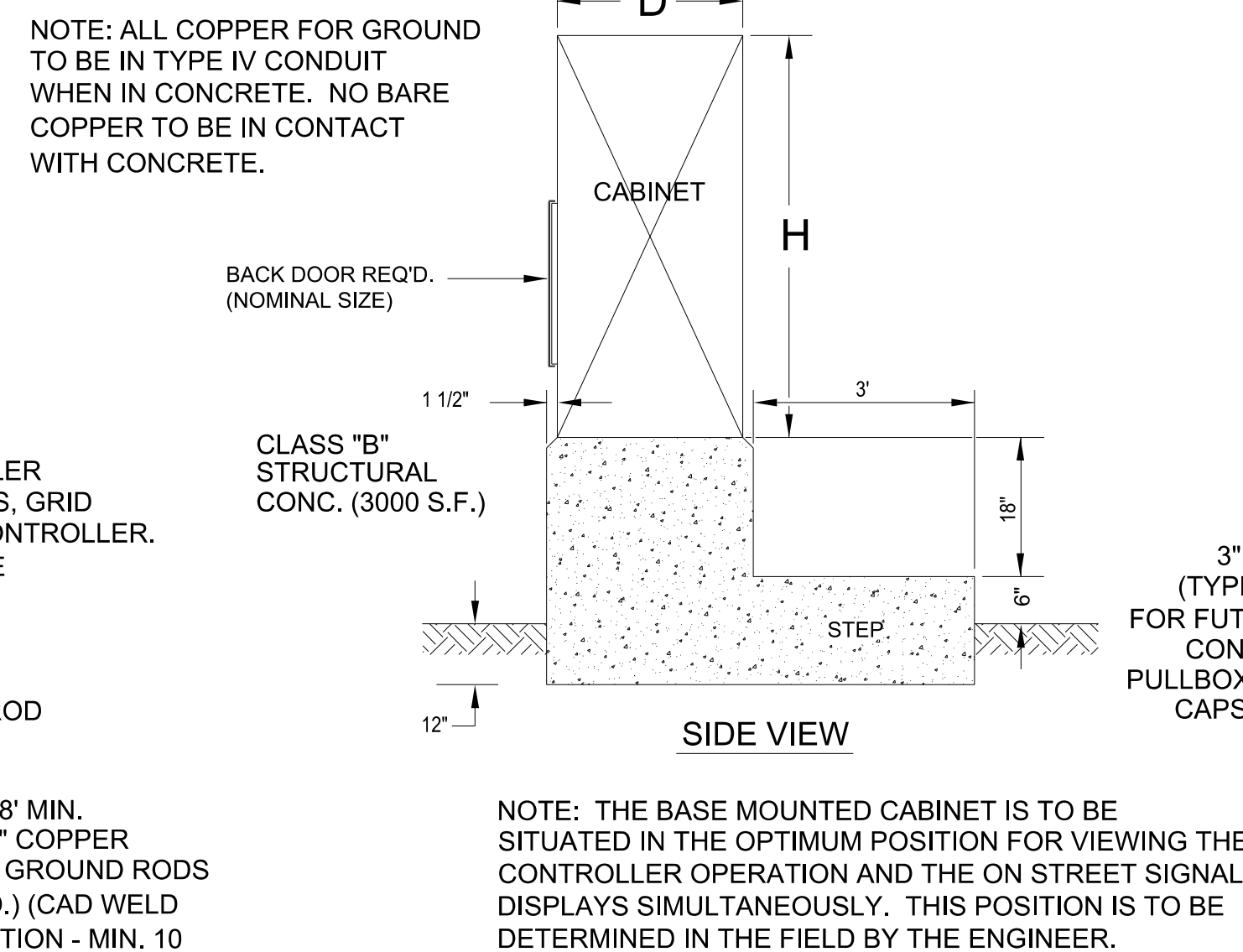
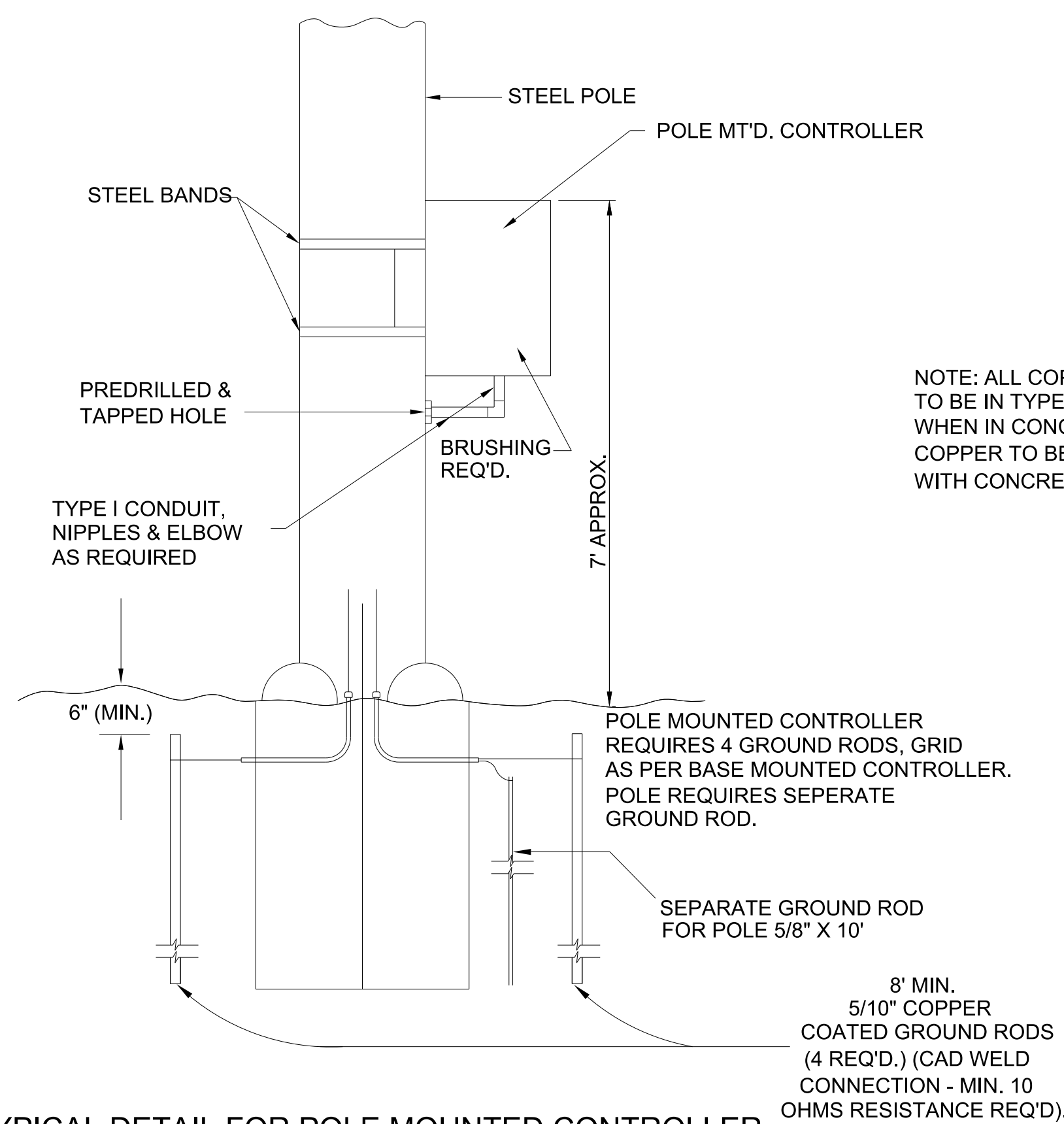
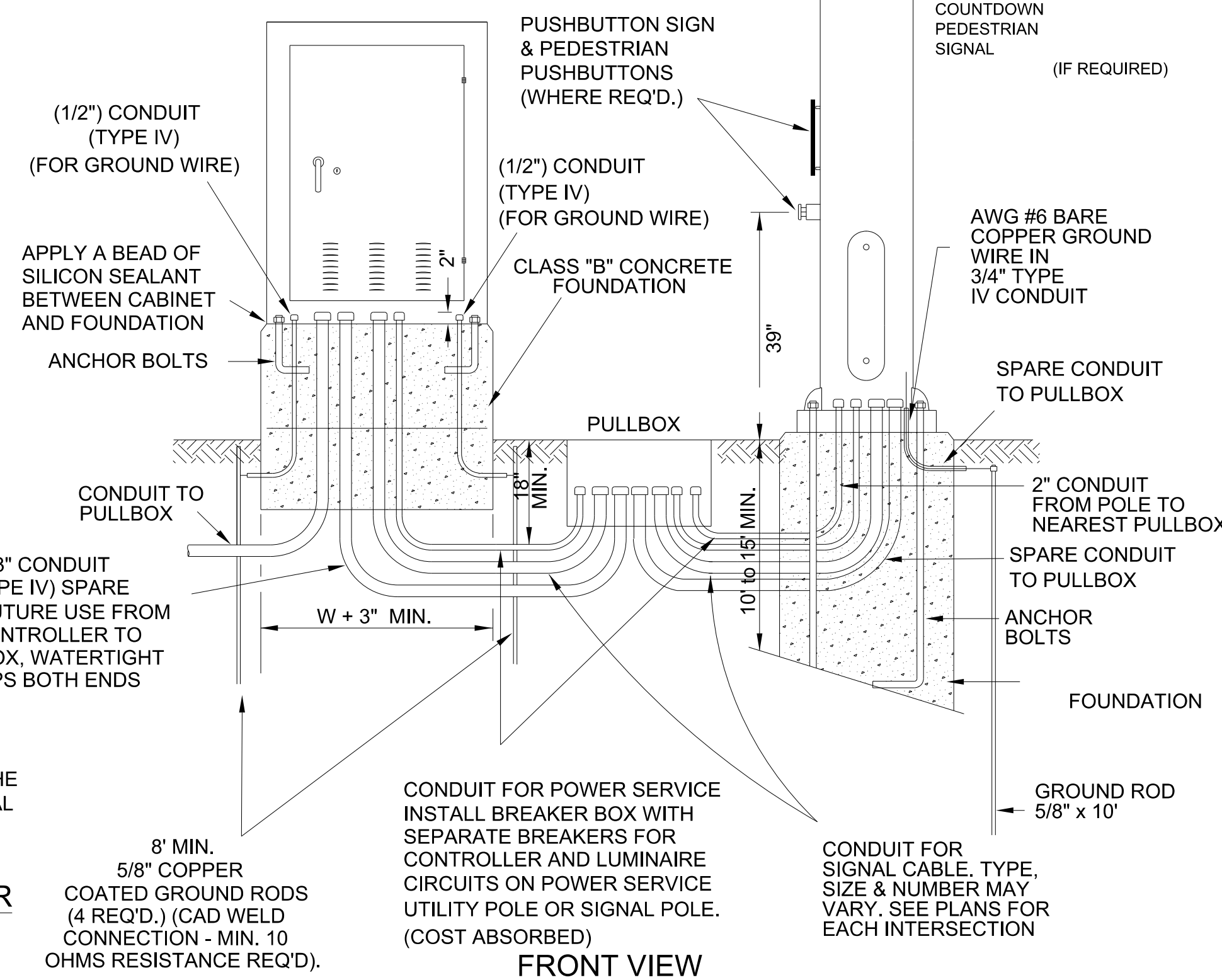
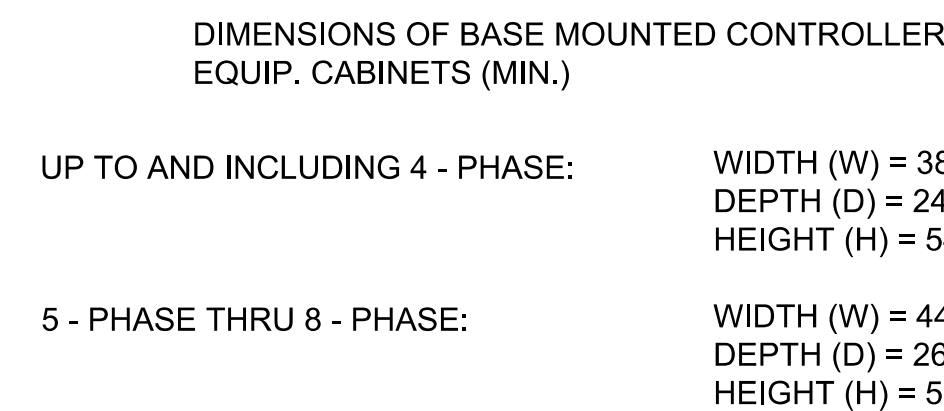
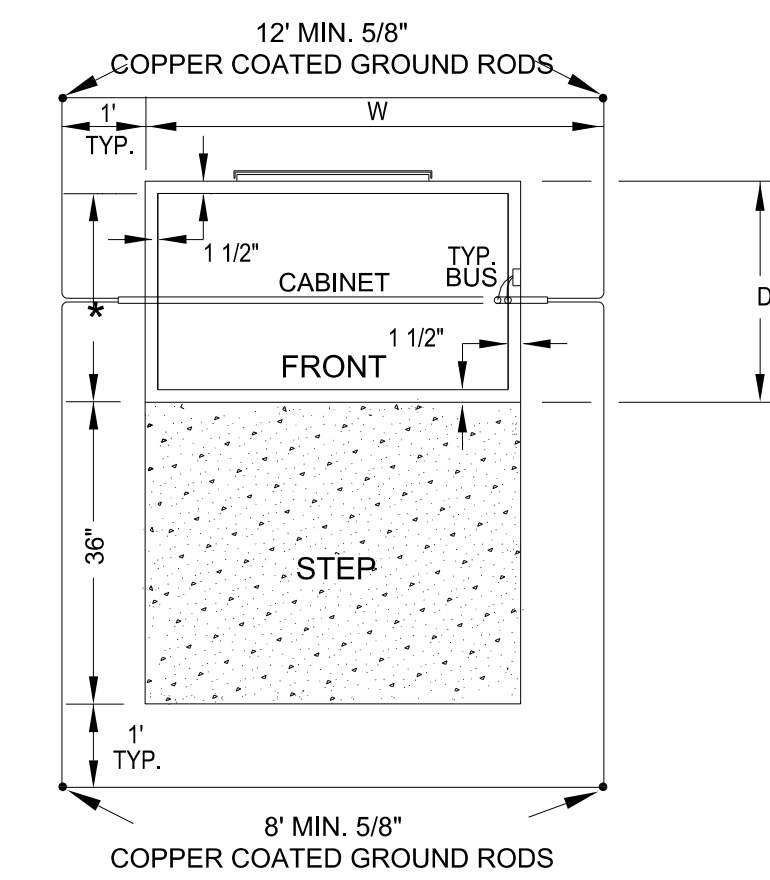
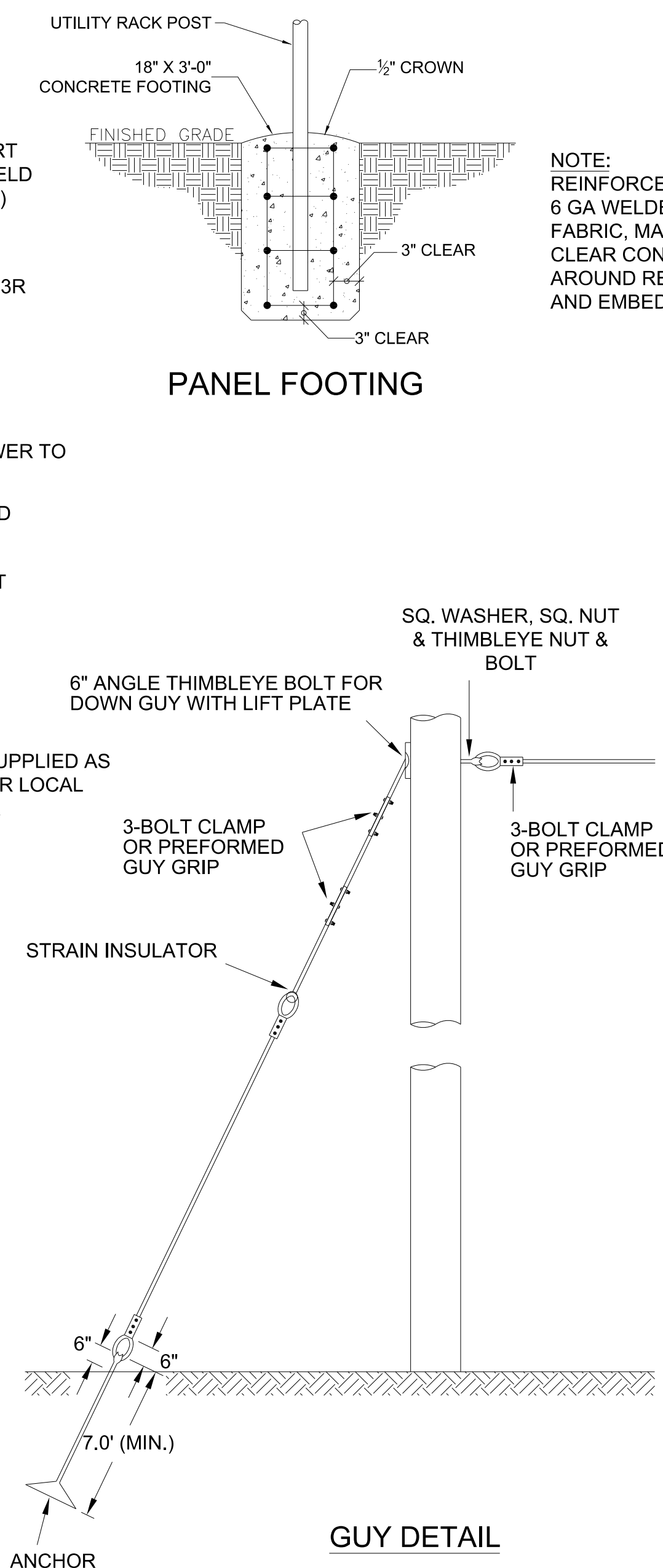
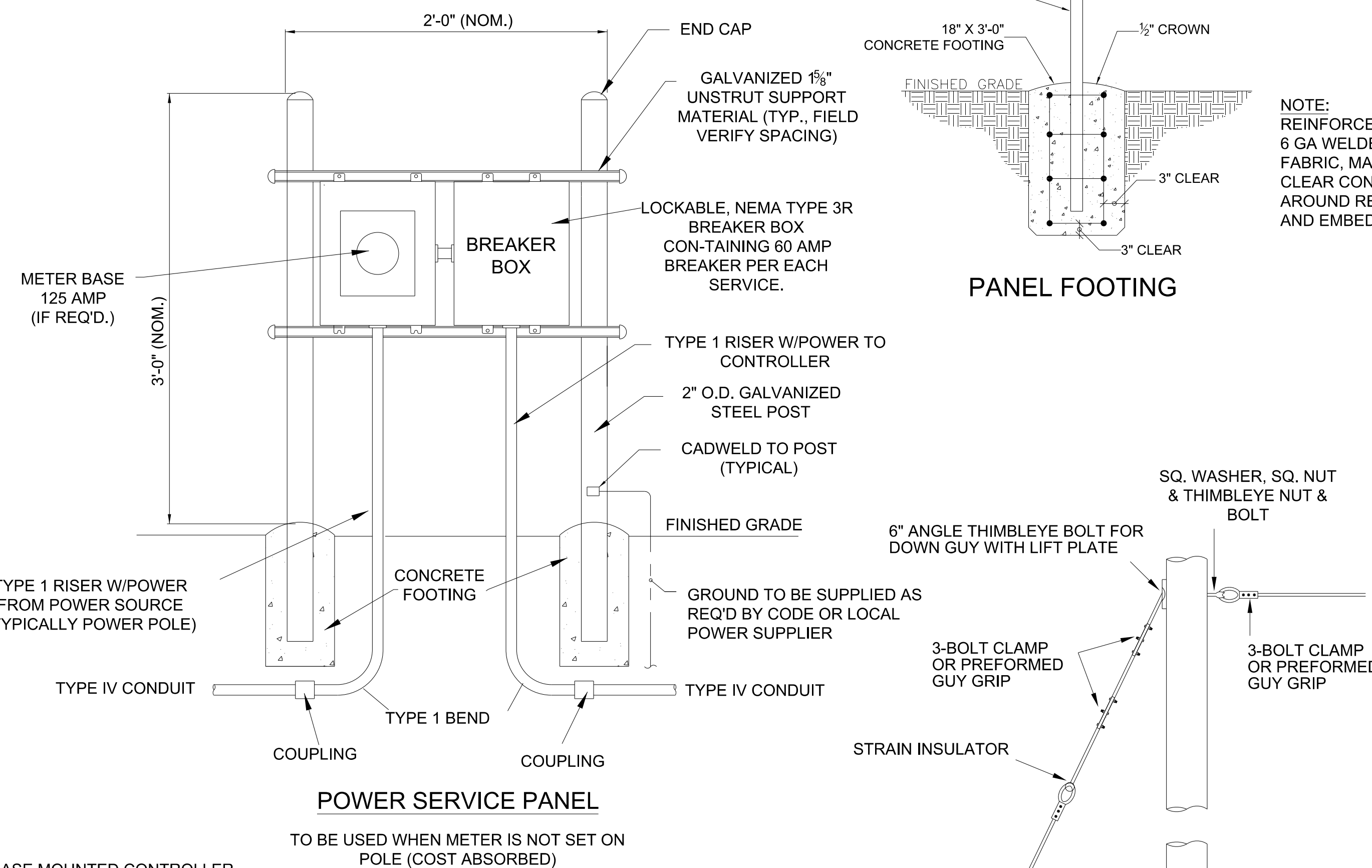
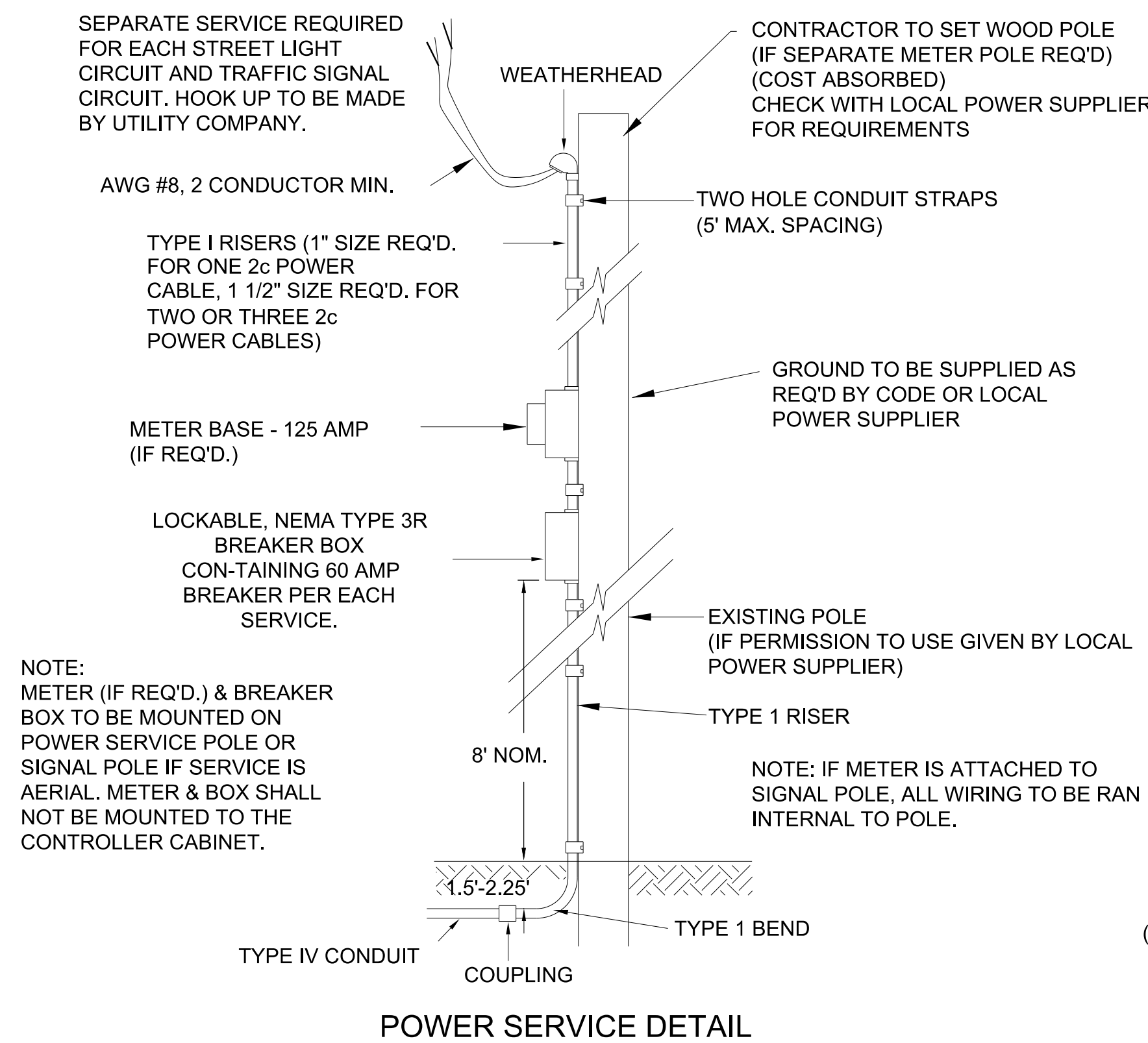
DATE

WORKING NUMBER

TSD-3

SHEET NUMBER

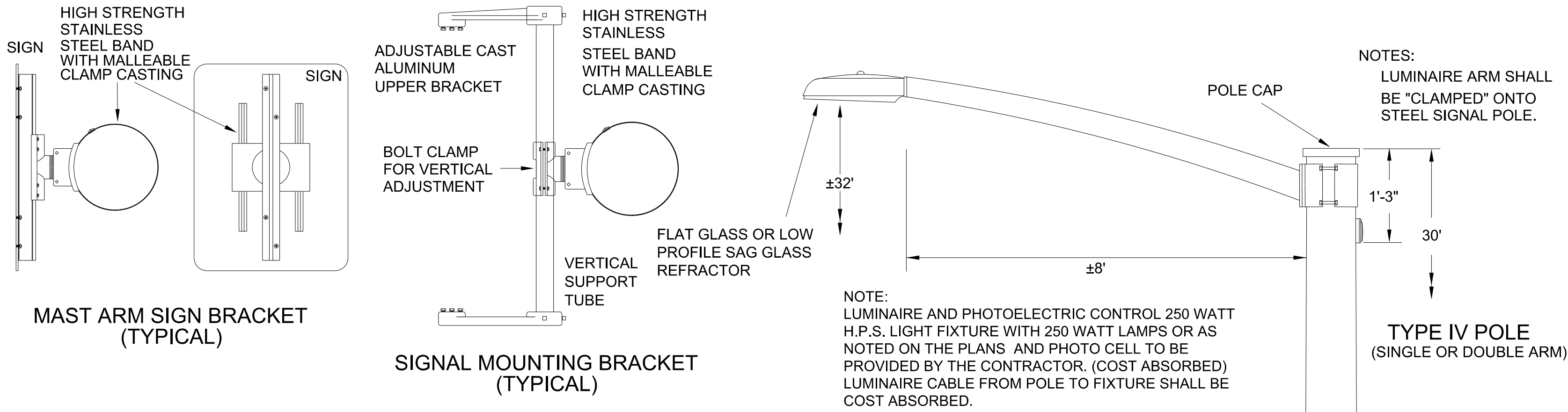
2005



- NOTES:
1. THE ANCHOR ROD IS 6" DIAMETER.
 2. DIFFERENT ANCHORS ARE: CHANCE 8-WAY EXPANSION ANCHORS OR 3/4" HELICAL 203mm OR AS NECESSARY FOR ADEQUATE HOLD.
 3. ANCHORS ARE TO BE 15' BEHIND THE HOLE IN LINE WITH THE SPAN, RESTRICTION TO THIS WILL BE PROPERTY LINES OR OBSTRUCTIONS.
 4. ALL ATTACHMENT FITTINGS SHALL BE HOT DIP GALVANIZED UNLESS STATED OTHERWISE.
 5. GUYS TO BE INSTALLED AS REQUIRED, DETERMINED BY THE ENGINEER (COST ABSORBED).

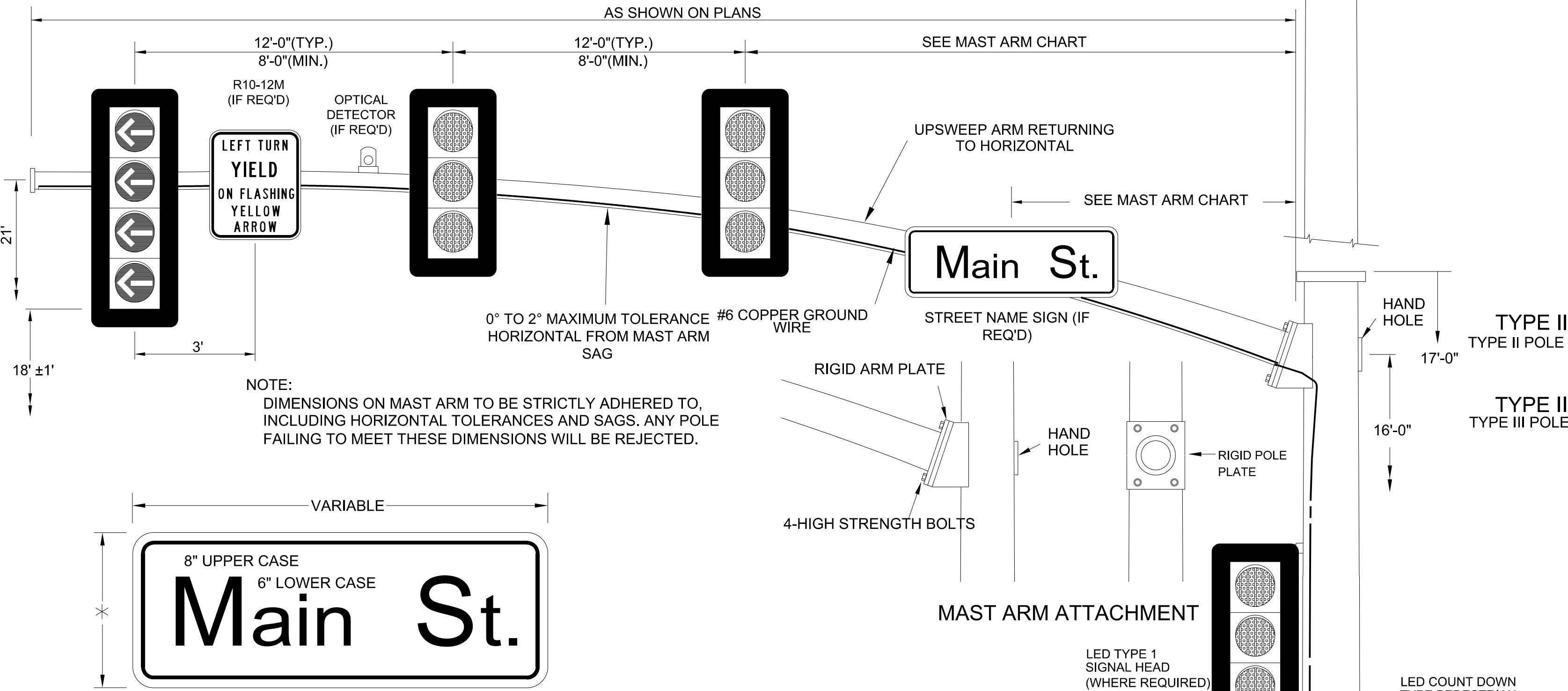
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| STATE | PROJECT NO. |
|-------|-------------------|
| MISS. | HSIP-0064-01(029) |



NOTES:

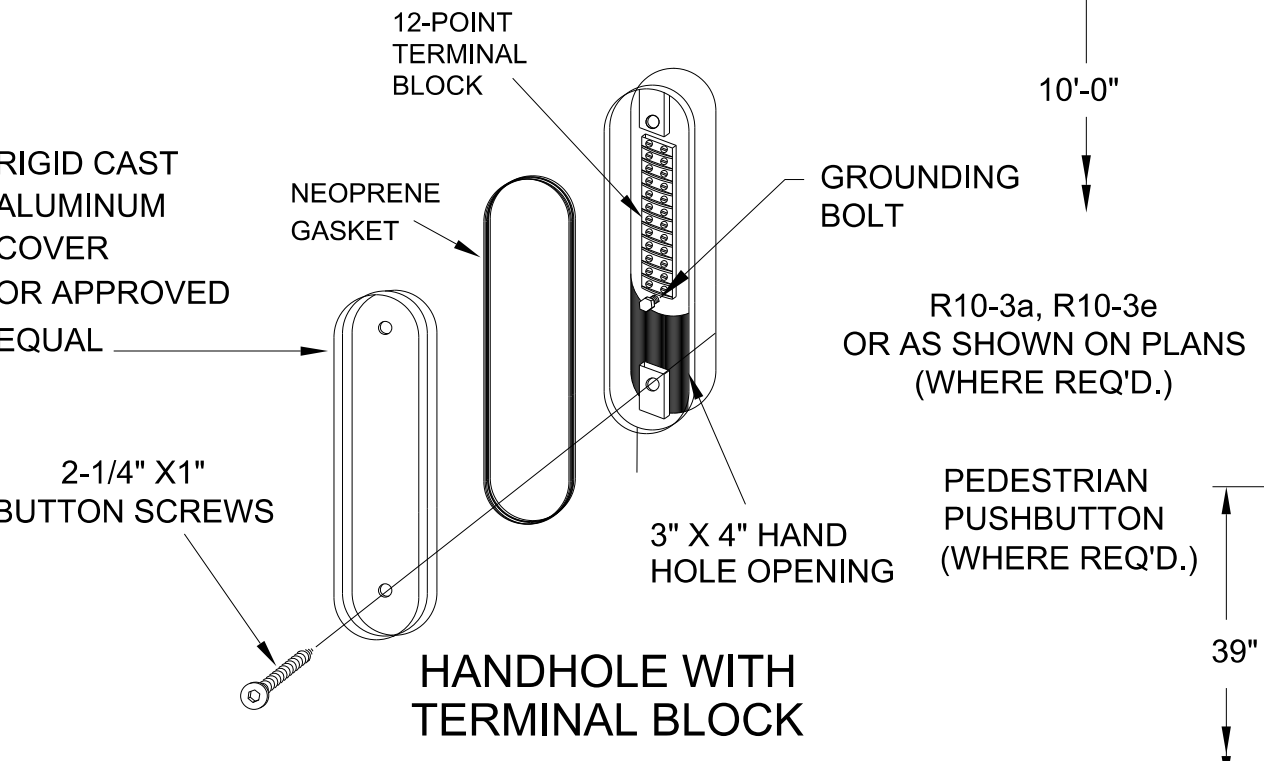
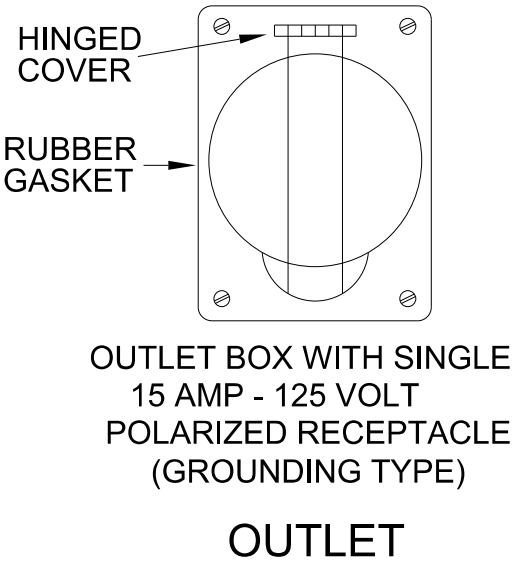
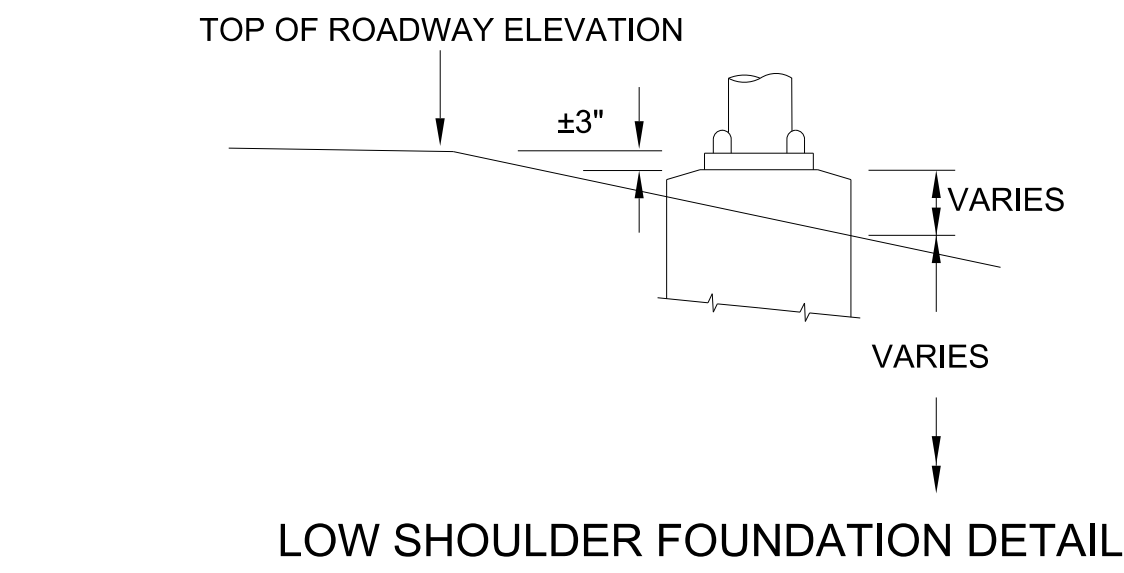
1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN FIELD.
2. RED SECTION INDICATIONS TO BE APPROXIMATELY SAME HEIGHT.
3. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE POLE MANUFACTURER.
4. THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II. DO NOT CONSIDER GALLOPING OR TRUCK FORCES. USE 50 YEAR DESIGN LIFE. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2001 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS.
5. #6 COPPER GROUND WIRE INSIDE POLE AND MAST ARM TO BE COST ABSORBED.



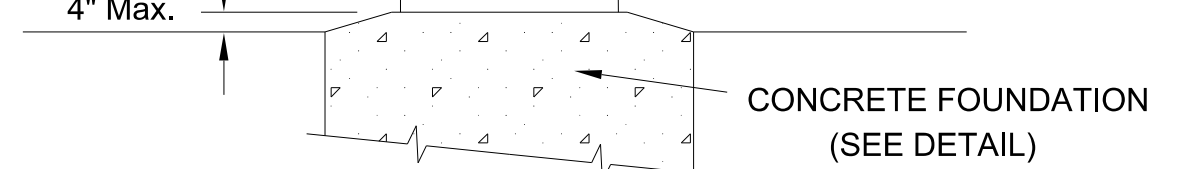
STREET NAME SIGNS (TYPICAL)(IF REQUIRED)

* HEIGHT = 1'-6" FOR SINGLE NAME, 2'-0" FOR 2 NAMES
THICKNESS = 0.1" WHITE TYPE IX SHEETING
ON GREEN TYPE III SHEETING

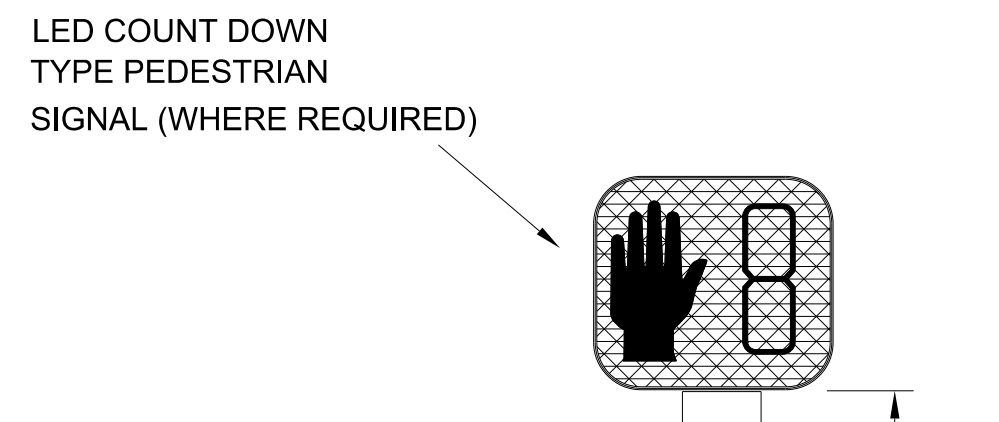
8" UPPER CASE, 6" LOWER CASE LETTERS; SERIES "C"
STREET NAME SIGNS REQUIRE A MINIMUM OF 2 MOUNTING BRACKETS
(30" MAXIMUM SPACING BETWEEN BRACKETS)



INSTALL QUICK DISCONNECT
5 AMP FUSE AND LUMINAIRE
CABLE FROM POLE BASE TO
LUMINAIRE (COST ABSORBED).

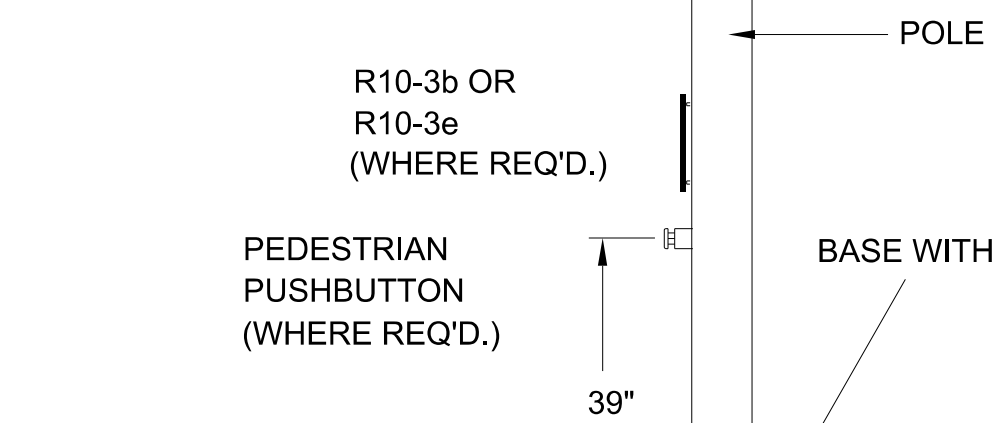


STEEL MAST ARM POLE DETAIL

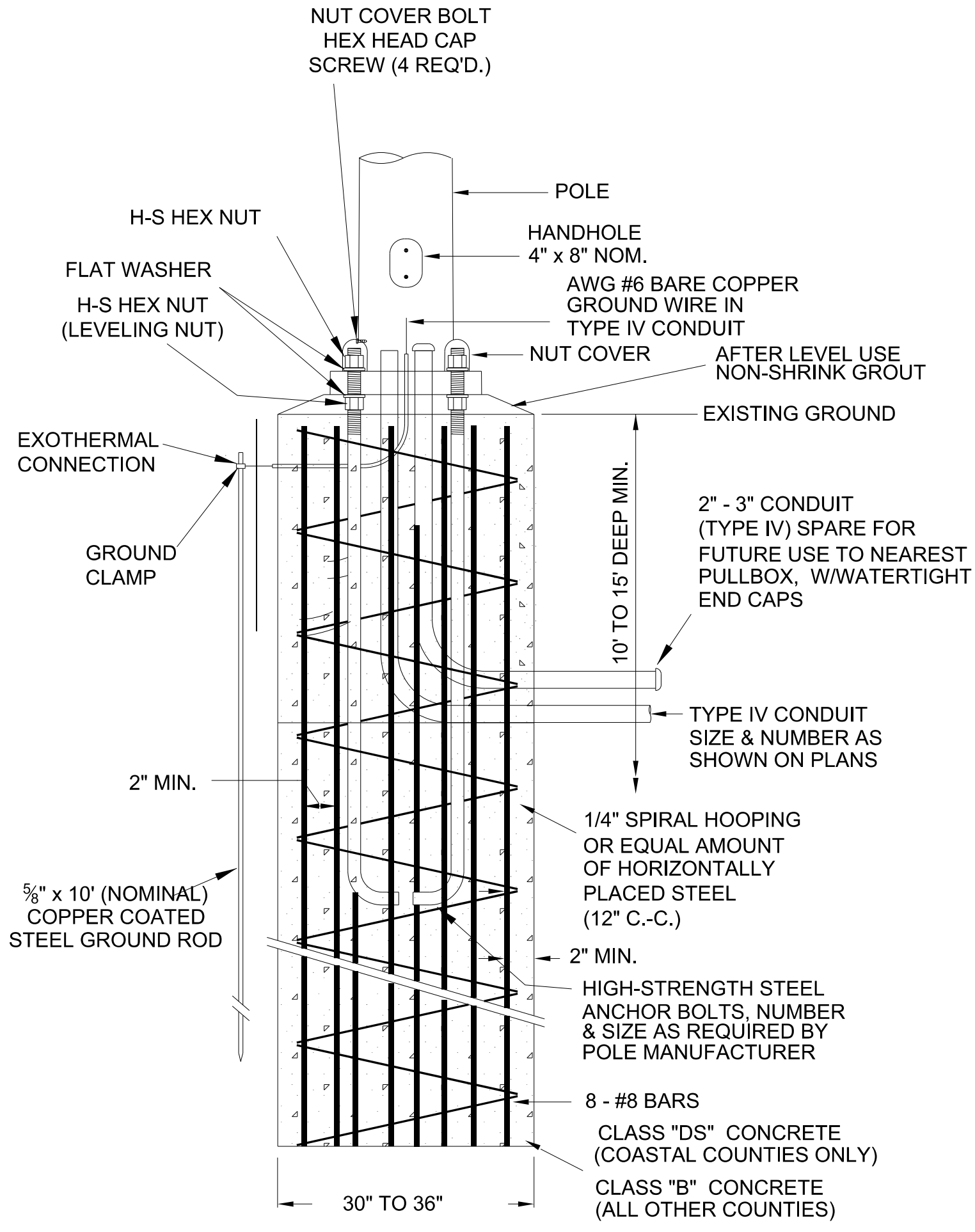


TYPE II POLE
TYPE II POLE - (SINGLE ARM)

TYPE III POLE
TYPE III POLE - (DOUBLE ARM)



TYPE V POLE (TRAFFIC SIGNAL)
TYPE VI POLE (PEDESTRIAN SIGNAL)



STEEL MAST ARM POLE FOUNDATION DETAIL

GENERAL FOUNDATION NOTES

1. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATIONS FAILING TO MEET MINIMUM DIMENSIONS WILL BE REJECTED.
2. DRY SHAFT EXCAVATION MUST MEET REQUIREMENTS OF SECTION 803.03.2.3.2, IF GROUNDWATER OR HOLE INSTABILITY IS ENCOUNTERED, SLIP CASING AND 10' TREMIE SHALL BE REQUIRED.
3. WIND LOAD DETERMINES SHAFT DIAMETER AND DEPTH:

ALL TYPE IV 30' POLE SHAFT - USE 36" DIAMETER, 15' DEPTH

COASTAL COUNTIES (140mph) - 36" DIAMETER, 15' DEPTH WITH SLIP CASING.

100mph to 130mph - 36" DIAMETER, 15' DEPTH, SLIP CASING NOT REQUIRED

ALL OTHER COUNTIES (90mph) -
SINGLE MAST ARM: 30" DIAMETER, 10' DEPTH
DOUBLE MAST ARM: 36" DIAMETER, 12' DEPTH
*SEE WIND LOAD MAP IN 2001 AASHTO GUIDELINES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

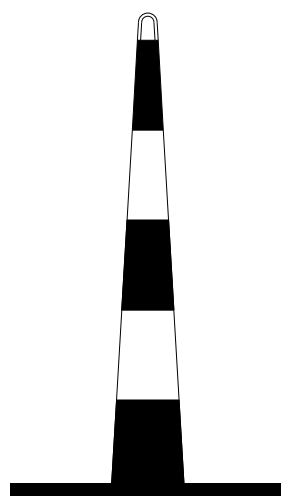
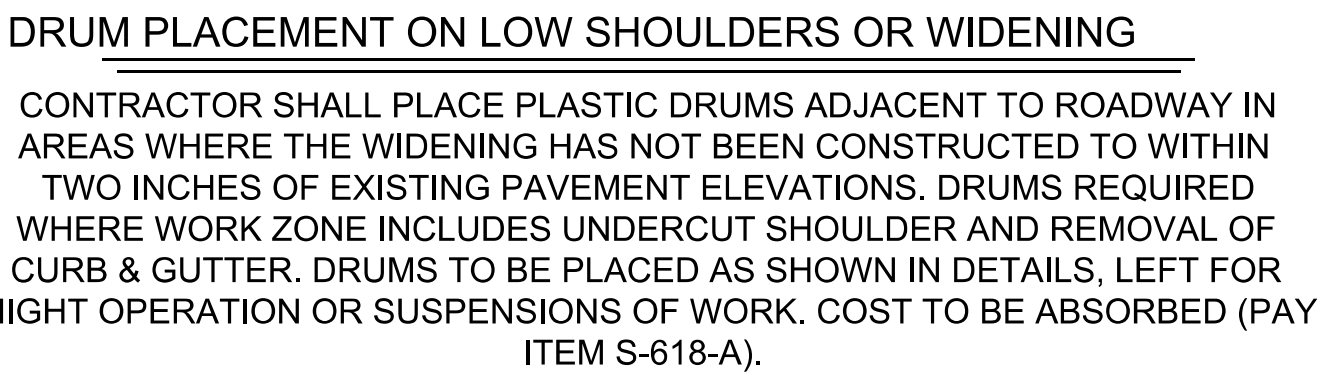
MAST ARM AND PEDESTAL
POLE DETAILS FOR
TRAFFIC SIGNAL
INSTALLATION

PROJECT NO.: HSIP-0064-01(029)
COUNTY: HARRISON

FILENAME: TSD-6.dgn

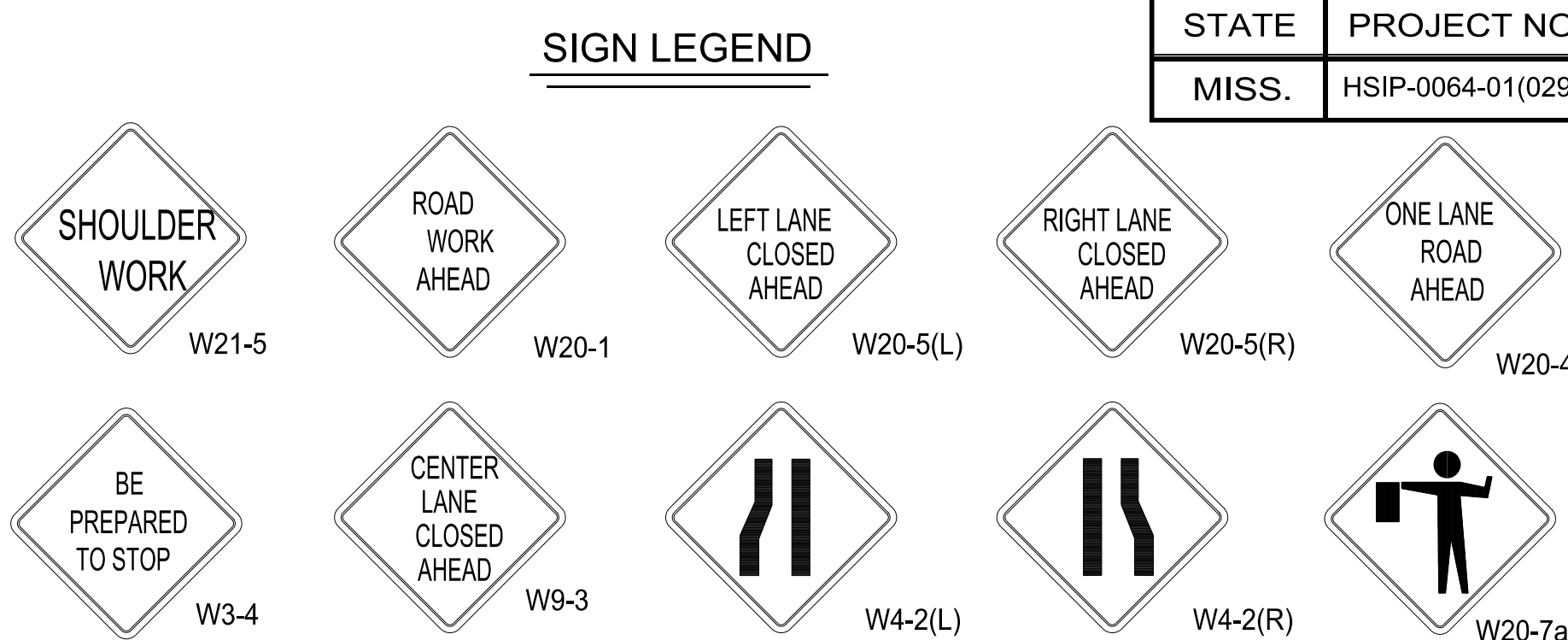
DESIGN TEAM CHECKED DATE

WORKING NUMBER
TSD-6
SHEET NUMBER
2007



TRAFFIC CONE

CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.



GENERAL NOTES

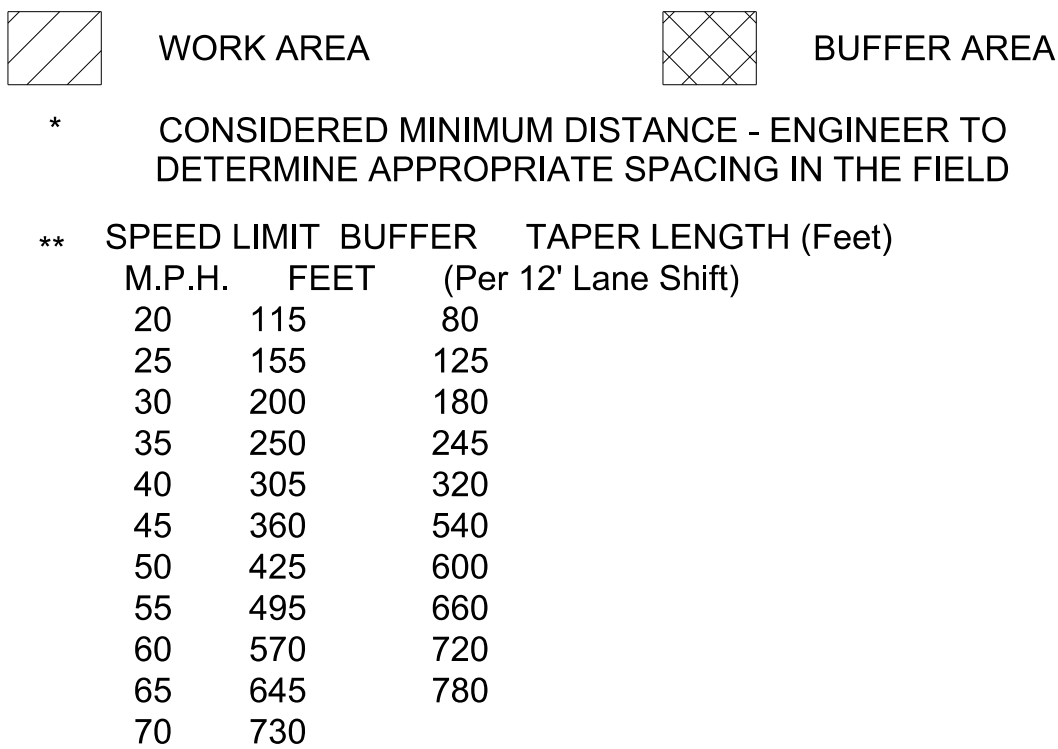
1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY. ANY ADDITIONAL SIGNS SHOULD BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
2. POST MOUNTED SIGNS SHALL HAVE A 7' MINIMUM MOUNTING HEIGHT.
3. PAYMENT FOR ALL SIGNS, CONES, DRUMS, CONCRETE BARRIERS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
4. APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
5. FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERECTED IN MEDIAN AREA (8' MIN. MEDIAN WIDTH REQUIRED).

LEGEND

DRUMS (30" MAXIMUM SPACING) - CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

SIGNS - SEE SIGN LEGEND MIN. SIZE 48" x 48", BLACK ON ORANGE BACKGROUND

FLAGGER WITH PADDLE - 18" STOP/SLOW PADDLES ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES SHALL BE USED. HANDHELD FLAGS SHALL NOT BE FOR FLAGGING OPERATION.

[illegible]